

# National Safety News

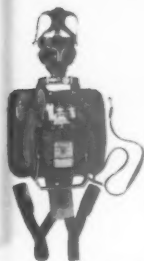
MAY 1951



**WEIRTON  
STEEL**  
  
**saves  
1/2 the time**  
  
**once needed for  
this blast furnace  
maintenance job  
through**



# M·S·A CHEMOX



In line with the iron-clad company policy that "safety comes first" Weirton Steel Company equipped its blast furnace maintenance workers with M. S. A. Chemox oxygen breathing apparatus. This move, intended as a protective measure, paid unexpected dividends in production.

These maintenance men work at a height of 25 feet or more above the outer floor around the furnace, replacing pipes and cleaning out the blast furnace coolers around the shell by flushing the system. When the furnace is tapped, heavy concentrations of gases and fumes occur, and some gas is always present. Previously, maintenance work had to stop during every furnace tap. Much of each worker's time was expended climbing up and down.

With Chemox apparatus, the men worked in comfort

uninterruptedly under the heaviest concentrations of gas. Time for a maintenance job was cut in half. Says one official: "The cost of equipping the men and the cost of canister replacement is nothing compared to the time saved and the fact that the men can work in comfort and without danger."

M. S. A. Chemox apparatus provides complete respiratory protection in any toxic atmospheres. Moisture from breath starts continuous oxygen generation; all the wearer does is *breathe*—the equipment does the rest. The greater efficiency of the Chemox is demonstrated by the fact that it weighs less than half as much and serves fifty percent longer than any U. S. Bureau of Mines approved demand apparatus. Replaceable canisters are unaffected by storage and retain full capacity until open with no recharging problems or expense. Chemox reduces maintenance to a minimum, and assures long, trouble-free, dependable service. Ask for Bulletin B-14—and request a demonstration.

*Call the M. S. A. Man  
on your every safety problem . . .  
his job is to help you*

**MINE SAFETY APPLIANCES CO.**  
**BRADDOCK, THOMAS AND MEADE STS.**  
**PITTSBURGH 8, PA.**

At Your Service  
54 Branch Offices in the United States and Canada



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**SAFETY EQUIPMENT HEADQUARTERS**  
**M·S·A**

For prompt safety service

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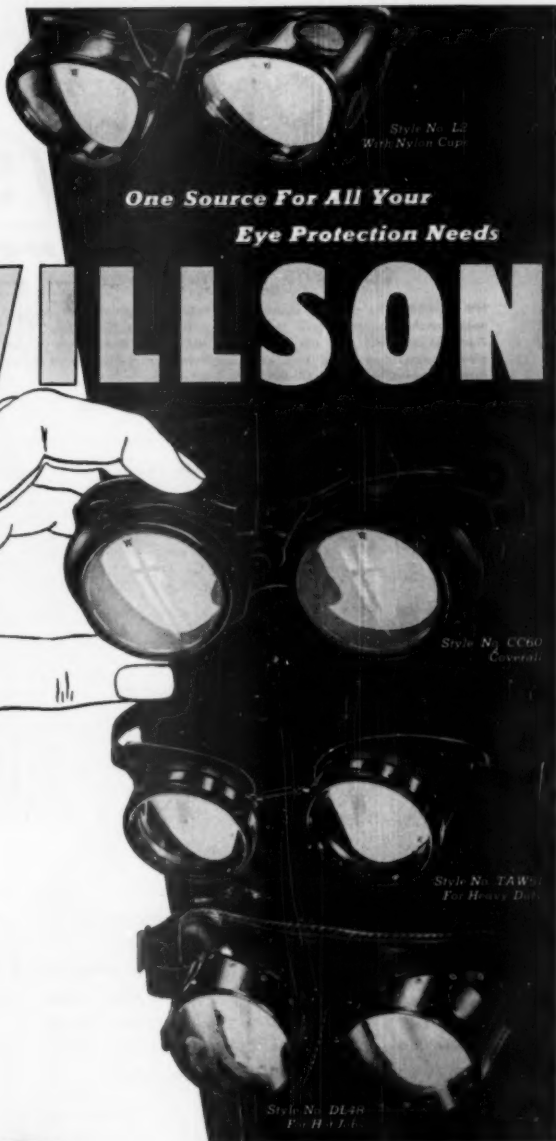
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Style No. L2  
With Nylon Cups

One Source For All Your  
Eye Protection Needs

Style No. CC60  
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Style No. TAW9  
For Heavy Duty

Style No. DL48  
For Heavy Duty

#### Comfort • Size • Safety

For workers on heavy duty jobs; in hot or dusty work; exposed to chemical splash—any hazardous job—you can get what you need from WILLSON. Not only that, but every type has comfort features that help get safety equipment worn; and all have reliable WILLSON Super-Tough\* lenses. For help in selecting exactly the right equipment for your needs, ask our nearest distributor for our new catalog—or write direct to WILLSON PRODUCTS, INC., 205 Washington St., Reading, Pa.





# ORDER summer shoes NOW!



## **safti-woven**

No. 1615—Tan elk with heavy, single oiled oak leather sole, half rubber heel with leather base. A and B—sizes 6 to 12; C, D, E, EE—5 to 13.

THESE ARE THE STYLES your employees are ready to buy right now for Summer dress and street wear. You can give your Foot Safety Program a healthy boost . . . keep more men in safety shoes through the hot months . . . by showing them the same identical styles WITH steel toe protection! Breezy vents and woven strips give heat the air . . . look fine, feel fine on the job and off. Order a few pairs for display right away. Your men will like the saving as well as the extra comfort.



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No. 1621—Brown bal; single oak leather sole, half rubber heel with leather base, lined counter, green Nodol lined quarter. A and B—sizes 7 to 12; C, D, E—5 to 12.

*exclusive*  
"sock-saver" leather toe lining  
(pat. pend.)  
Ends tearing socks • Feels more comfortable



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SAFETY SHOE COMPANY  
ALLENTOWN, PA.

**ACCO**  
**Registered**  
**WIRE ROPE SLINGS**

**WITH**  
**DUALOC**\*

• Made from preformed improved plow steel wire rope with independent wire rope core.

• Develops full catalog strength of rope. Ending is locked for full life of the wire rope.

• Flexibility of DUALOC permits close, secure snubbing.

• Wire ends are completely enclosed. Can't snag hands or clothing.

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• We're so sure you will like ACCO Registered WIRE ROPE SLINGS that we ask you to try just one. Put it in service with a sling you now use. Compare it in every way. You'll find it is stronger, lighter in weight, easier to handle, safer to use—and—cheaper in the long run.

• Proof-tested, registered, and warranted to satisfy. You can't lose if you use ACCO Registered STRAND-LAID and CABLE-LAID WIRE ROPE SLINGS. See your local distributor today or write us for further information.

\*Trade Mark Registered

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**ACCO**

Wilkes-Barre, Pa., Chicago, Denver, Houston, Los Angeles, New York,  
Philadelphia, Pittsburgh, San Francisco, Bridgeport, Conn.

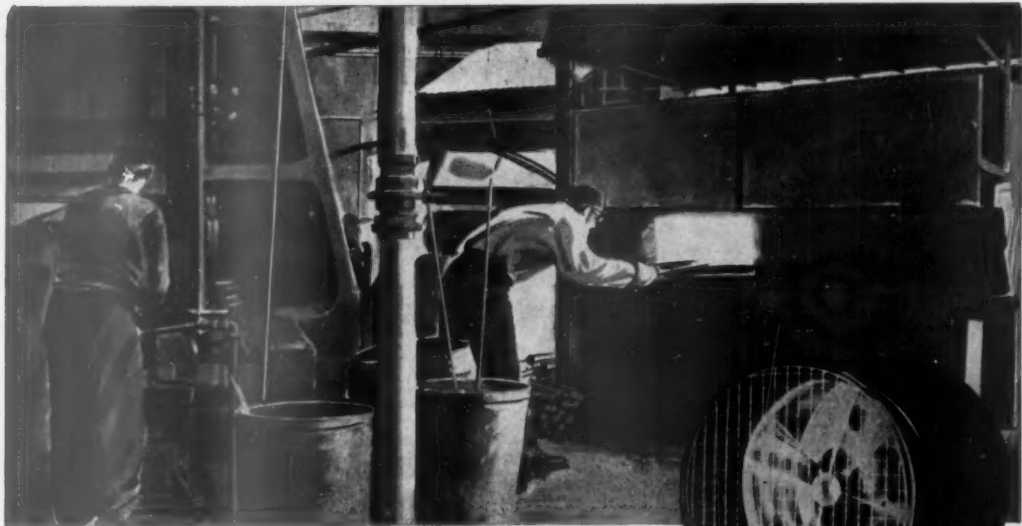
**AMERICAN CHAIN & CABLE**  
**WIRE ROPE SLING DEPARTMENT**

TRADE  
MARK



*In Business for Your Safety*

Made by the  
Originators of  
*Preformed*  
WIRE ROPE



## COOL HEADS IN "HOT SPOTS" WON'T LET YOU DOWN

On jobs where the air is foul or hot, men can't be blamed too much for letting up now and then. If you want to keep their efficiency and morale high, feed them better air.

Employers have learned the value of putting Coppus Blowers and Ventilators on the job . . . in confined areas and near furnaces or hot processes. The men work faster, do better work, work longer without fatigue — and appreciate the more comfortable working conditions.

Give some thought now to the "hot spots" in your plant. There is a

Coppus Blower for practically any requirement — Cable Manhole and Tank Ventilators, Boiler Manhole Blowers and Exhausters, Heat Killers, Shiphold Ventilators, etc. The Coppus "Blue Ribbon" is your assurance of design and construction planned for plenty of severe service. Check and mail the coupon for specific information. Coppus Engineering Corp., Worcester 2, Mass. Sales Offices in THOMAS' REGISTER. Other "Blue Ribbon" Products in BEST'S SAFETY DIRECTORY, CHEMICAL ENGINEERING CATALOG, REFINERY CATALOG.



**COPPUS ENGINEERING CORP., 125 PARK AVENUE, WORCESTER 2, MASS.**

Please send me information on the Blowers that clear the air for action.

- ☐ in tanks, tank cars, drums, etc.
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- ☐ on steam-heated rubber processes.
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- COOLING:**
- ☐ motors, generators, switchboards.
  - ☐ wires and chests.

- ☐ general main cooling.
- ☐ around cracking stills.
- ☐ exhausters, welding fumes.
- ☐ stirring up stagnant air wherever men are working or material is drying.

NAME .....

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(Write here any special ventilating problem you may have.)

## MACWHYTE SLINGS AT WORK

These pictures illustrate the wide range of material being handled by Macwhyte Slings in hundreds of plants.



ATLAS Type 1 Round-Braided Slings  
lifting marine engines



MONARCH Type 1 Slings  
handling boiler



MONARCH Type 1 Slings  
handling roll



ATLAS BH-2 Round-Braided Sling  
handling sheet pack



DREW Flat-Braided Slings  
loading refinery vessel



ATLAS Type 1 Round-Braided Slings  
handling gun



DREW Flat-Braided Sling assemblies  
moving refinery tower



ATLAS Type 5 Round-Braided Slings  
handling tank



ATLAS Type 1 Round-Braided Sling  
lifting water turbine shell



MACWHYTE Lift Beam and MONARCH  
Slings handling sheet steel



DREW Type 5 Flat-Braided Slings  
lifting section of submarine

## MACWHYTE COMPANY

2902 Fourteenth Avenue, Kenosha, Wisconsin. Mill Depots: New York • Pittsburgh • Chicago • Minneapolis • Fort Worth • Portland • Seattle • San Francisco • Los Angeles. Distributors throughout U.S.A. Manufacturers of Internally Lubricated PRE-formed Wire Rope, Braided Wire Rope Slings, Aircraft Cables and Assemblies, Monel Metal and Stainless Steel Wire Rope.

Complete information gladly furnished on request.

## SPECIALLY MADE FOR YOUR NEEDS

Here are shown three  
Macwhyte E-2 Slings.  
Each has a different  
body design.

### Many sizes and constructions

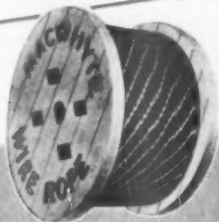
All Macwhyte Slings are made to order  
in the size . . . length . . . type and body  
design . . . to meet your needs.

Take advantage of our experience and  
save time and money. For complete in-  
formation write to Macwhyte Company  
or any Macwhyte authorized distributor.

Member National Safety Council



For cranes and hoists use PREformed  
Monarch Whyte Strand Crane Rope  
made by Macwhyte Company



**MACWHYTE  
COMPANY**  
KENOSHA, WIS.

Monarch E-2  
Single-part  
Wire Rope Sling

Drew E-2  
Flat-braided  
Wire Rope Sling

ATLAS E-2  
Round-braided  
Wire Rope Sling





# All 6 accident prevention features in ...

## EXCLUSIVE AIR-CELL CONSTRUCTION

LIGHTWEIGHT FLEXIBILITY!

SLIP RESISTANCE!

LONG WEARING!

WATERPROOF!

HEAT AND COLD INSULATION!

FATIGUE-LESS COMFORT!

Reg. U. S. Pat. Off.

If these 6 accident prevention features are important to you, then always specify famous **Vul-Cork** or ...

**Vul-Cork**

**Vul-Cork Oil Resisting Neoprene Soles** — the only soles made with exclusive **AIR-CELL CONSTRUCTION**.

**Vul-Cork**  
**OIL RESISTING**  
**NEOPRENE**

**Vul-Cork** oil-resisting Neoprene combines **VUL-CORK'S** famous comfort features with complete protection against excessive oils, acids, caustics, and hot surfaces underfoot. With Neoprene, lightweight **VUL-CORK** Soles remain flexible, do not crack in extreme cold, do not revert — or melt — on hot surfaces. The ideal all-purpose sole.

*Free descriptive literature sent on request*

**Vul-Cork SOLES WITH EXCLUSIVE AIR-CELL CONSTRUCTION, patented and made exclusively by**

THE **Cambridge RUBBER COMPANY** VUL-CORK SOLE DIVISION  
TANETOWN, MARYLAND

# EASY DOES IT!

Goggles are a Safety Man's nightmare—when they're dirty. So are glasses. Every insurance company warns against the accidents, poor work, lost time and hazards that come from foul sight. Every indemnity premium-payer, production supervisor, or plant doctor knows the cost.

You would be willing to do most anything to make eye protectors more acceptable to employees—and more efficient. Yet goggles or glasses stay dirty and dangerous in plants and laboratories *unless you make it as easy as possible for workmen to clean them.* And that's the reason MAGIC LENS TISSUE and its simple Single-sheet Dispenser were born.

For, if you ask your working folks to use a rag or ordinary fiber paper, lint and smears stick to most lenses. If you give them a small treated sheet, it tears and one sheet doesn't do the job. If you ask them to fuss with a cleaning fluid, time is wasted by this old-fashioned method, except in grimmest operations. No wonder jumbo-size, super-strong MAGIC LENS TISSUE has swept the alphabet of industry from American Can to Zenith Radio.



## NO BOTHER—NO WASTE—NO FLUID—NO COMPLICATED DISPENSER

*Each sheet is over 50% larger than usual . . . yet it costs you less.* The paper is—without question—the finest that can be made . . . scientifically controlled at every step. It polishes as it cleans. As easy as lifting your finger. NO FUSS. NO WASTE. NO FLUID. NO COMPLICATED DISPENSER. See how dust, lint, dirt and smears vanish like magic and an invisible coating of silicone is deposited on the lenses, which protects them; gives longer clarity, gives sparkling crystal-clear sight, makes cleaning faster, easier, better, more lasting. It's General Electric Silicone—from the G.E. House of Magic—that does it; a combined development of the General Electric Company (Silicones Division) and ourselves against our background of 25 years in the pulp and paper industry.

The sheets reach you interfolded in instantly Ready-to-Use Refill Cartridges from our special interfolding ma-

chines; 800 super-strong, jumbo-size sheets per packet, 6 packets to the carton @ only \$1.40 per packet (\$8.40 per carton). The simple, single-operation, self-serving Dispenser has no moving parts. It's attractive, indestructible, secure; a credit to any plant, laboratory, engineering department or office. Solid 20-gauge cold rolled steel, beautifully enameled in National Safety Council green. Lock and key feature. Five year guarantee. Measures only 3½" x 7½" x 3½" over-all. So compact you can place it elbow-close on-the-job wherever needed, to be used while workers remain at work without wandering around. And it is used because it is easy to use. Yet the Dispensers cost only \$2.50. All prices FOB our factories. Wire or write us, or order through your safety supplies jobber today. **GO MODERN—GO MAGIC.** A lot more safety for a lot less money. **COMPLETE YOUR INSTALLATIONS TODAY.**

. . . IN A NEAT, COMPACT DISPENSER



*Magic Lens Tissue*  
T.M. REG. U.S. PAT. OFF. SILICONE TREATED

The Silicone Paper Company of America, Inc.

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## SPECIFICALLY TAILORED TO AIRLINE REQUIREMENTS

C.A.A. Approved  Flexible Unit  
Aviation First Aid Kits...

... standard equipment for most major airlines

*It costs less* to operate with the MSCo unit system. It is more economical—improves inventory control...expedites inspection...streamlines purchasing...assures economy—within minimum space requirements. Adding to the over-all operation efficiency and training of personnel, it can be used for ground and air stations interchangeably.

Every standard assortment meets regulations of C.A.A. Release No. 128.

Whatever the size airliner, there's an MSCo kit for it. Canvas case recommended for life rafts and aircraft carrying less than six passengers... weather-proof metal cases for larger planes and at ground stations where medical personnel are not immediately available. Write now for circular giving complete facts on MSCo First Aid—*first in aviation first aid!*



MSCo 24-unit kit for  
25 passengers or more



MSCo 16-unit kit for  
5 to 25 passengers





MSCo 10-unit kit for  
1 to 5 passengers



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BOOTH 19, HOTEL SHIRLEY-SAVOY • DENVER, MAY 14-16

**Medical Supply Company.** 1025-5 West State Street  
ROCKFORD, ILLINOIS

KEEP YOUR WORKERS CALM,  COOL  AND  
**PROTECTED**

~~COLLECTED~~ ... ALL SUMMER LONG!

STOCK THESE **Iron Age** STYLE LEADERS

These smart, dress type safety oxfords are your prescription for better coverage during warm weather. On the foot they feel as cool and comfortable as they look. Vamps are perforated for air conditioned ease. Custom hand lacing lends the distinctive touch of

quality. Your workers will grab these Iron Age value leaders—wear them all summer at both work and play.

Better get your stock order in to Iron Age early—there may not be enough of these styles to go 'round.



**VENT WEAVE**  
 SAFETY OXFORDS

**MOC-WEAVE**  
 SAFETY OXFORDS

  
*The Safety Shoe  
 for  
 Industrial America*

WITH  
**NEOLITE**  
 SOLES

The nationally advertised long wearing sole material. "Step on it."



**Iron Age** DIVISION

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# B R E C K

## PROTECTIVE CREAM

### PROTECTS AGAINST INDUSTRIAL DERMATITIS

Harsh skin cleansers are often found to be a cause of industrial dermatitis. This cause may be eliminated by the use of Breck Protective Cream to keep dirt, grime and oil from becoming firmly embedded in the skin. Breck Protective Cream forms a protective film against lubricating oils, petroleum solvents, tar, printing inks and paints. Regular applications are made easy by use of the dispenser top.

*Other Breck Industrial Preparations are Breck Hand Cleaner, a mild, non-alkali skin cleanser and Breck*



*Water Resistant Cream, a protective cream that is resistant to the action of water and water solutions.*

JOHN H. BRECK, INC. • MANUFACTURING CHEMISTS • SPRINGFIELD 1 MASSACHUSETTS  
NEW YORK • SAN FRANCISCO • OTTAWA CANADA



# HOW TO IMPROVE YOUR FLOORS WITH KWYKWAX



**GLOSS** — a high, hard luster — breathes life into even the oldest flooring. Kwykwax produced a rich-looking sheen on this well battered linoleum without buffing or polishing . . . and new floors respond like magic! A deep, long-lasting gloss that will not darken wood or other surfaces. After heavy traffic wear, a light buffing brings back new, brighter sparkle.



**PROTECTION** saves floor repair. Kwykwax resists hot and cold water. Won't spot or peel . . . even after long, "rainy day" exposure. Repeated application restores worn floors.



**SAFETY** is only good business sense. So too is Kwykwax, listed by the Underwriters' Laboratories as an anti-slip floor treatment. Ask the ladies — soon as your floors are Kwykwaxed!



**APPEARANCE** and application go hand in hand. Kwykwax spreads on smoothly and easily. Without lapping or streaking. A non-tacky finish means floors stay cleaner.



**HARDNESS** can be easily tested. Ask a West representative to coat a standard test sheet with your present wax—and Kwykwax. Scratch both with the edge of a coin. You judge!



**ECONOMY** here can mean extra profits. There's 1500 to 2000 sq. ft. of coverage in every gallon of Kwykwax! Squeeze it out . . . the thinner the coating the better.

An independent survey\* proves it! Recently, field and laboratory tests were conducted without favoritism on a wide range of flooring materials. At the request of a well-known association. Of 26 water-emulsion waxes tested, only Kwykwax earned a triple top rating in the three main classifications: Gloss . . . mar-resistance . . . water-resistance. Kwykwax surpassed a number of higher-priced competitors! Prove it to your own satisfaction. Compare your present wax with a test sample of Kwykwax. For a free sample write Dept. 7.

\* Ask your West representative for a copy of this wax evaluation report.

National Safety News, May, 1951



42-16 West Street, Long Island City 1, N. Y.  
(64 Branches in the U. S. and Canada)



## "I PASSED A BLIND MAN *Today*"

### 1 SELL EYE SAFETY TO EMPLOYEES

Ask your distributor's representative to show you the kit of posters, pay envelope inserts, PA system scripts and other material that sells workers forcefully on *desire to use* proper safety eyewear.

### 2 SAFETY GLASSES FOR EACH JOB

A complete range of Bausch & Lomb safety eyewear, engineered to meet the most rigid tests for each job classification in your plant.

### 3 PROTECTION PLUS CORRECTION

For at least 50% of your workers prescription lenses are necessary to working efficiency as well as to safety. Your B&L distributor offers prompt prescription service on all types of industrial eyewear.

**T**HAT'S the title of a story written to one of the workers now on your payroll.

Which one?

The "one" who is thoughtless—who understands the purpose of eye safety measures *only* when it's put to him dramatically, graphically.

"I Passed a Blind Man" is available now in a forcefully written pamphlet for pay envelope or other distribution—a tiny part of the *total* eye safety service performed by Bausch & Lomb for all firms interested in a *total* eye safety program. Write Bausch & Lomb Optical Company, 681-5 St. Paul St., Rochester 2, N. Y.



BAUSCH & LOMB  
*Safety Eyewear*

# Full Leather Lining in the Safety Shoe men want!

Check all 4 Big Reasons why  
your men will wear this shoe willingly!



S-4380  
Fully leather lined.  
New "Winguard 400"  
steel safety toe box.  
Width A—8 to 11  
B&C—7 to 11  
D&E—6 to 12  
EE—7 to 11



**1. HEEL TO TOE COMFORT.**  
Complete leather lining prevents soreness and chafing of toes, cuts down on wear and tear of socks.



**2. STREET-SHOE STYLING.**  
No question about its good looks. Men want to wear them off the job as well as at work. Rich, russet leather.



**3. LONG WEAR.** Top-quality materials and workmanship for lots of hard, rugged wear. Heavy all leather sole.



**4. THE NAME MEN KNOW BEST.** Thom McAn is America's largest maker-seller of men's shoes. More men wear Thom McAn's than any other brand—which proves they know the name best and want the shoes most!

It's a leader in Thom McAn's great new line of Mastercraft Safety Shoes—bearing the name men know best from coast to coast. **Order now!**

## SOLD 2 WAYS

1. Stocked for your men in Thom McAn stores.
2. Sold direct to plants.

Details of this service, plus information on the 4-way employee purchase plan, and the Thom McAn safety shoe features, should all be on your desk. Just write us and we'll see that they get there.

THOM MCAN SAFETY SHOE DIVISION  
25 West 43rd Street, New York 18, N. Y.



A DIVISION OF MELVILLE SHOE CORPORATION





# STEEL TOE PROTECTION

*plus*

# LACE-TO-TOE COMFORT

In these two popular numbers Hy-Test offers the toe protection of its famous Anchor Flange steel box *plus* the flex-to-toe comfort of a lace-to-toe shoe. These features combined with Hy-Test quality make H722 and H797 the perfect built-for-action shoes.

Write for Catalog



... Insure Workers' Feet in Sure Protection

*with*

# HY-TEST SAFETY SHOES



THE WORLD'S LARGEST SELLING SAFETY SHOE  
MAKERS AND INTERNATIONAL CHAIN STORES  
AND ALL MAJOR RETAILERS



# NATIONAL SAFETY NEWS

MAY, 1951

## Building America's Might

ON APRIL 1, C. E. Wilson published his first report to the President of the United States on his work as director of defense mobilization. This report, entitled "Building America's Might," is must reading for every responsible leader in industry—including every industrial safety man.

It is the tough-minded report of an able industrialist faced with an enormously difficult task in the public service. It is a report which makes it clear that we are strengthening our nation—and also that the effort already made is but a small part of that we must make.

Of special interest to safety workers is the section, "Making the Most of Our Man Power Resources." It analyzes our needs for man power and our sources of that man power. In February, Mr. Wilson reports, we had 61,300,000 men and women in our civilian labor force. Yet, he states, "The major part of the employment impact of the defense program upon civilian industries still lies ahead." He warns that we will have to find 3,000,000 to 4,000,000 new defense workers.

In this tight labor supply situation, the report points out, we must not only recruit labor and transfer it; we must also make more effective use of man power. One method of doing this is to "Keep man power working full time and at peak productivity by providing favorable working conditions, *health and safety programs* (my italics), minimizing lost time due to production factors, and eliminating unnecessary work."

There is no room in the Wilson report, which discusses a huge and complex program in very limited space, to spell out safety program needs in detail. I take it that it is up to safety men and safety organizations to implement the Wilson policy in practical, immediate terms.

The problem is urgent. Decisions on plant expansion, on recruitment and training programs, on process changes, on conversion and retooling are

being made under pressure. In the making of these decisions, the professional safety engineer has an important part to play.

It is up to him to show management that the means he recommends to prevent accidents are intimately linked with efficiency and productivity in both the long and the short run. The safe plant layout is the efficient plant layout. A sound safety program is an aid to recruiting. A training program must include safety training to be adequate, even when judged solely as production training. In problems of changing process and retooling, the safety man's recommendations are bound to be in the direction of sound industrial engineering.

The safety engineer does not stand alone in this work. He has at his disposal the resources of many groups with long experience and great knowledge of safety. State and federal labor departments can help. Insurance companies and insurance organizations are ready to serve. The National Safety Council, its local chapters, local safety councils and other safety organizations provide a clearing house of information and a medium for the exchange of ideas.

We must never forget that the greatest loss of man power through accidents is not from on-the-job mishaps. In homes, on farms, on streets and highways, in other public places, accidents are bleeding away desperately needed man power. Industry cannot ignore this larger share of the accident problem—the larger share of the loss to the defense effort—merely because these accidents occur outside the plant gates.

I believe that the Wilson report indicates the growing power and intelligence of our nation. It proposes monumental problems in urgent need of solution. Safety problems are a part of the picture. This great national effort demands greatest contributions of energy and intelligence of which we, individually and as organizations, are capable.

Neil H. Dearborn





Fabian Bachrach photo

# We Owe It To Our People

By WILLIAM B. GIVEN, JR.

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**A strong health and safety program is an obligation of management — one that brings measurable profits**

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**I**T IS a challenge to be an American citizen today. Our country has never been in greater need of men and women of good will. If our country is to survive, we must be conscious of our obligations to humanity, as well as to our country. As good industrial citizens, we must be conscious of our human obligations.

We in management have experienced many baffling situations in the last twenty years. There have been many times when the long range international outlook, labor and management conflicts, political news, and our trend toward a welfare state have made it almost impossible to keep our sights on the right targets.

One of the most critical questions which comes out of such scares is: Will industry let disappointments and anger boiling out of difficult labor relations, for example, blind it to the long-range future—its possibilities and its obligations? Are we, who have had pension plans for many years, going to change our minds about their desirability and justness be-

cause such plans have been forced on many companies recently?

Such questions are not merely academic ones. Actually, for our own and our families' preservation, we must keep our sights high. We must make every effort to fulfill our human obligation to help make life better for others. We must attack with optimism.

## Management's Opportunity

Management has a greater opportunity than any other group to help retard the trend toward socialism. This can be done by rating the friendship, the confidence of the people with whom we work. We must prove, by performance, not statements, that our interest in their welfare, their present and future security is genuine. That this interest comes out of a sense of company obligation to the people who make its success.

I wonder if there has ever been a more important, a more vital opportunity for men in business to influence the future. I wonder if it is too much to hope that each year more and more managements will go all out in their efforts to rate the good will, the confidence, the friendship of company families. I wonder if, in pursuit of this objective, there is a more important ideal on which to set our sights than the best possible working conditions.

Since the time I started in Brake Shoe, the president's job has

changed greatly. In the early period, his most important responsibility, and it took most of his time, was selling. Today's number one concentration is on company people.

Not too many years ago there was a feeling in management, generally, that company employees were indebted to the employer. For years, I have spent an important part of my time trying to help supervision in all ranks understand better the fundamentals of employer-employee relationship, the company debt to all men in the organization who pull their oar in advancing the company toward its objective. A proper sense of proportion is gradually developing. Human relations are at last getting the recognition due them. Their effect on earnings is known. Altruism and dividend rates are not incompatible.

Today, we all know that if our employees possess sound bodies, peace of mind, and good working conditions, increased efficiency and better products result.

Most managements have ceased thinking of plant people in terms of their working hours only. Every man's work attitude and effectiveness is related to his home, his social environment, his philosophy, his economics, and his happiness. In our company, when a man comes to work with us, we think of his whole family joining the

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WILLIAM B. GIVEN, JR., is Chairman of the Board, American Brake Shoe Company, New York. This article is a condensation of a talk before the Midwest Industrial Health Conference, Minneapolis, May 10, 1950.

ranks. How each of the members feel towards the company is important to us. We are trying to rate the confidence and good will of the entire family. To that end, sporadic efforts are of no avail. This takes daily, all-out concentration, just as it does in our home.

We know that a strong medical and hygiene department with an available nurse for each plant is not only something companies owe their people, but that it turns in a profit for stockholders through the development of better human relations.

#### Medical Program

We operate 54 plants in the United States and Canada. They average approximately 130 employees per plant; the biggest 550, the smallest 41. Our medical department consists of a doctor as director, a chief industrial hygienist, and a staff of ten technicians and clerks. Also reporting to the medical director is a superintendent of nurses who supervises the activities of our plant nurses. These nurses provide nursing service to 20 of our plants on a full time basis and 25 plants on a part time basis. We are working toward providing nursing service at the remaining nine plants, all of which are very small. It takes time but can be accomplished.

Every new employee is given a physical examination, including chest X-ray, before he is finally hired. This is a preplacement examination which enables us to place the employee on a job for which he is physically qualified.

Complete physical examinations, including laboratory tests, are given all employees every two years by a local doctor serving each plant and office. All plant employees receive a chest X-ray once a year. These are taken by our own mobile X-ray unit which travels from plant to plant.

In conjunction with the medical program, our industrial hygiene engineers are constantly checking the plants to eliminate unhealthy working conditions caused by dust, fumes or chemicals.

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## Third DSS Award for Air Force



**GENERAL HOYT S. VANDENBERG**, U. S. Air Force Chief of Staff, receives the Award of Honor for Distinguished Service to Safety from President Ned H. Dearborn, National Safety Council. The award was won by the ground safety record of the USAF for 1950. Left to right: Colonel W. L. Tubbs, Mr. Dearborn, Gen. Vandenberg, and Maj. Gen. Richard E. Nugent.

For the third time in seven years, the United States Air Force has received the "Distinguished Service to Safety" Award of the National Safety Council.

The award, NSC's highest, was presented to General Hoyt S. Vandenberg, Chief of Staff of the USAF, on March 30 at the Pentagon, by Ned H. Dearborn, president, National Safety Council.

The award is presented for a world-wide ground safety record. Its presentation noted that the Air Force showed an over-all reduction of 10.3 per cent in 1950 as compared with the previous year, despite the tremendous expansion caused by Korean operations.

The late General H. H. Arnold received the award for the Army Air Force in 1944 and 1945.

In citing the Air Force, the National Safety Council noted that on-duty military fatalities were reduced by 32 per cent in 1950 which saw a general decrease all down the line in all types of ground covered by the program.

The Air Force ground safety program includes all types of

ground accidents such as motor vehicle, maintenance, construction, training, industrial, recreation, sports and aircraft.

These are distinguished from flying accidents in that the aircraft are damaged on the ground by vehicles, other aircraft, or storms when the aircraft engines are not running.

Aircraft accident costs due to ground action in 1950 were reduced by more than 50 per cent over the previous year. Despite a tremendous increase in miles operated, 1950 displayed a decrease of 11.1 per cent in the vehicular accident rate. The rates were based on 100,000 man-days while the accidents were computed on the basis of 100,000 miles-of-operation.

Statistics also revealed that 24.4 per cent of all Air Force ground accidents occurred between the morning hours of 1 and 3. The safest time of the day, according to the figures, was between the hours of 6 and 9 in the morning. The second most dangerous period was between the hours of 3 to 6 in the afternoon.

The majority of all off-duty fatalities and about one-half of all off-duty injuries are sustained in the operation of private motor vehicles. Sports and recreational activities (swimming, hunting, etc.) are responsible for the second greatest number of off-duty accidents.



A class in fire extinguishing methods at Delco-Remy.

## TRAINED AND ALERT

By CAPT. T. E. PETERS

**O**UR FIRE PREVENTION record over the years has been a source of pride to us at Delco-Remy Division of General Motors. In both 1949 and 1950 we were awarded first place in the industrial division of the Na-

CAPTAIN T. E. PETERS, chief fire inspector for the Delco-Remy Division of General Motors, is nationally known for his industrial and community fire prevention work. A veteran of 17 years at Delco-Remy, he came to the Division as a plant protection patrolman. By 1940 he had worked his way up to the post of lieutenant in charge of plant protection personnel in Plant No. 3. In that year he was promoted to the rank of captain and assumed his present duties.

In addition to his plant work, Captain Peters gives an average of 50 fire prevention lectures throughout Indiana communities each year. He has designed a number of pieces of equipment including special hose reels, and dip and wash tanks for flammable liquids at Delco-Remy.

**Five hundred men serving in Delco-Remy fire brigades have kept plant fire losses low and won many awards**

tional Board of Fire Underwriters' competition for the United States and Canada. In each of the three previous years we were among the top five.

We have attained this success through the formation and training of our fire brigades. These brigades are organized in each of the nine Delco-Remy plants in the Anderson, Indiana, group. Total enrollment in the brigades is approximately 500. Their training stresses the elementary chemistry of fire, hazards most likely to be encountered in our operations, and basic methods of extinguishment.

We teach the chemistry of fire by visual aids. One of these devices consists of an elaborate (but completely meaningless) set-up of apparatus from our chemical lab-

oratory—plus some equally spurious mathematical equations. We use this arrangement merely to emphasize the point that until very recent years fire was thought of as having a very complex chemical make-up.

We compare this with the familiar fuel-flame-oxygen triangle to emphasize the simplicity of the chemistry of fire. We find that this unusual presentation enlivens an otherwise dull topic and gives brigade members a clear understanding of the process of combustion. Our men learn quickly that fire is a chemical action in which oxygen combines with combustible material in such a manner that heat and light are given off.

It is then easy to understand the three basic methods of ex-

tinguishing a blaze: First, by cooling the combustible material below its ignition temperature. Second, by excluding oxygen from the material. Third, by removing unburned material from the vicinity of the blaze.

We have compiled our own classifications of fires and their causes, tailored to fit the hazards of our particular plants. These are:

#### Classifications of Fires

Class A—Most solids and vegetation; wood, paper, textiles, leather, rubber, plastics, and dusts (except metal dust).

Class B—Flammable liquids; solvents, grease, waxes, paints, varnish and shellacs.

Class C—Electrical equipment; motors, transformers, fuses and switch boxes, heating units and wiring.

Class D—Motorized equipment (except electrical); automobiles, freight trucks and industrial trucks.

Class E—Metals; iron, aluminum, magnesium, potassium, sodium, lithium and others.

Class F—Miscellaneous; chemicals, drugs and explosives.

#### Classifications of Causes

1. Open flames; sparks, high temperatures, cutting and welding, furnaces, ovens, cupolas, incinerators, stoves, matches, cigarettes and driers.

2. Friction; hot bearings, rubbing belts, grinding, polishing, sawing and drilling operations.

3. Electricity; arcs, static, lighting, open switches, defective wiring and overloads.

4. Chemical reactions; acids, reagents and oxidizing agents (spontaneous ignition, chemical and organic).

5. Incendiary bombs; phosphorus, magnesium, sodium, potassium, thermite, oil and atomic bombs.

6. Explosions; flammable gas and liquids, gun powder, nitro-glycerin, steam and oxygen.

Our foremost fire hazard, unquestionably, is the cutting and welding operation. We instruct our men, therefore, along the following lines.

#### Cutting and Welding Fires

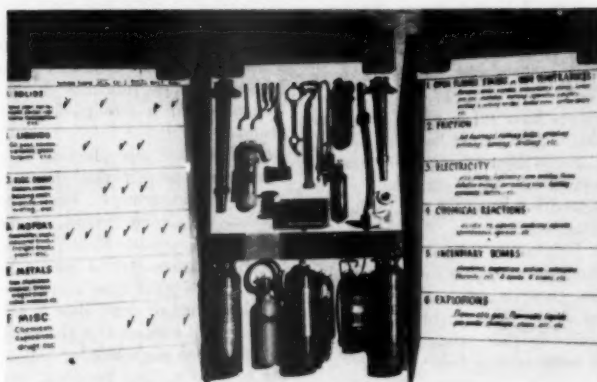
Cutting and welding are no doubt the "No. 1 Fire Hazard" of industry, but it is a necessary hazard. Cutting and welding may be done safely if proper precautions are taken before the job is started.

First, let us consider some of the

—To page 64



Demonstrating use of fog nozzle on flammable liquid fires.



Display board showing equipment and charts of classifications and causes.



Spraying floor before cutting job. Man stands by with extinguisher.

# The SAFETY VALVE

## This Changing World

OUT OF 140,000,000 people in the United States today, 63 per cent do not remember World War I . . . 48 per cent do not remember what conditions were like before World War II . . . 52 per cent do not remember a Republican administration in the White House.

Those are some figures presented by Ralph Brubaker to the Los Angeles Sales Executives Club as quoted by *The Pick-up*, a publication of United Parcel Service.

Mr. Brubaker also points out that since 1940: Thirteen and a half million old customers have died . . . over 17,000,000 marriages have taken place, and over 30,000,000 babies have been born. Perhaps these figures have changed somewhat since originally presented but they are still useful for illustration.

Originally, they were presented from the merchandising standpoint but there is a lesson in them for us, too. They ought to convince anybody that safety education is a never-ending job.

\* \* \*

Give instruction to a wise man, and he will be yet wiser; teach a just man, and he will increase in learning.—*Proverbs 9:9*.

\* \* \*

## Trees

*Lock, when ye hae naething else to do, ye may aye be sticking in a tree. It'll be growing, Lock, when ye're sleeping.*—SIR WALTER SCOTT.

EVER THINK of what your town would be like without trees? That loss has come close to many a community visited by the Dutch elm disease. For the present, we are considering not timber but the shade trees in our streets and yards.

Joyce Kilmer's ballad, with its

musical setting, and the venerable verse, "Woodman Spare That Tree" have helped to idealize trees to the point where it is almost sacrilege to apply the axe to one.

But trees, like people, are not all desirable citizens. There is little to be said in favor of that degenerate cousin of the maples—the box elder. And some fruit trees do little but drop wormy garbage on the lawn.

But you can have too many of even the best trees and they can be a nuisance if wrongly placed. You may have to choose between a lawn and shade, although some trees, like the thornless honey locust, permit a reasonable compromise.

Well-planned tree planting is a community project that deserves every encouragement. Down in Peoria, my good friend Harry Clatfelter, who edits *Walker Spirit* for Hiram, has been a leader in the drive to plant trees to replace the thousands of dead elms in the city. Harry reports that the project has been snow-balling and at the time of writing the local citizens were just waiting for favorable weather to start digging.

In addition to the editor's personal support, *Spirit* has aided the cause in its April issue with an editorial and a feature story on kinds of trees and planting hints by the landscape engineer for the Peoria Park District.

## Safety Thoughts From the Ancients

WE SHOULD NEVER so entirely avoid danger as to appear irresolute; but, at the same time, should avoid unnecessarily exposing ourselves to danger, than which nothing can be more foolish.—*Cicero*.

\* \* \*

THE DESIRE FOR SAFETY stands against every great and noble enterprise.—*Tacitus*.

## In This Issue . . .

"IS THERE a more important ideal on which to set our sights than the best possible working conditions?" That is the rhetorical question posed in this month's leading article by William B. Given, Jr., chairman of the board of American Brake Shoe Company. And Brake Shoe's policies, as interpreted by Mr. Given, offer a positive answer. The company's expenditures on safety, health, group insurance, and other items in the welfare package, have been substantial but they have actually improved the company's earnings as well as employee and community relations. (Page 18)

\* \* \*

BOTH PLANT AND COMMUNITY are covered in the Delco-Remy fire protection program headed by Captain T. E. Peters. Improved techniques of prevention and extinguishment, plus a continuous program of education and publicity have established an enviable record for the company. (Page 20)

\* \* \*

TO MANY READERS, Bill Andrews' Safety Engineer has become a very real person, in spite of his anonymity. He has had his times of triumph and frustration, just like all of us. In this month's installment of the *Diary*, he has a guilty feeling about some mishaps that have occurred. But he feels obliged to maintain the character of an all-wise chap and feels a hypocrite about it. (Page 24)

\* \* \*

MEMORIAL DAY, Fourth of July and Labor Day, as well as week ends and annual vacations are times of anxiety for many a plant safety department that has been able to keep men safe on the job. Here is a picture story of Bakelite's campaign to get workers started on a safe holiday. (Page 26)

*Carman Fish*



## Remember the Date — Oct. 8-12

**M**ORE meeting rooms and more guest rooms will be available for the 39th National Safety Congress to be held in Chicago, October 8 to 12. This year, the Palmer House has returned to the meeting rooms pool and five industrial sections will meet there. This will relieve the strain on the facilities of The Stevens, Congress, LaSalle and Morrison hotels.

Allotment of guest rooms for Congress delegates is the largest in several years and most of the rooms are in nine downtown hotels. The other three cooperating hotels are near the Council's North Michigan Avenue offices.

Exhibits will be held in the Stevens and the Congress. Registration desks will be at all hotels where meetings are scheduled.

The deadline for completion of Congress programs is June 15, but because this year's Congress will be held earlier than last year's, sections are trying to complete their programs in advance of the deadline.

Although the supply of available meeting rooms is larger this year, it will be advisable to make reservations as soon as possible. Housing Bureau forms are being sent to all members.

**Date and Hotel Assignments**

	Hotel	Oct. 8 Monday		Oct. 9 Tuesday		Oct. 10 Wednesday		Oct. 11 Thursday		Oct. 12 Friday
		AM	PM	AM	PM	AM	PM	AM	PM	AM
<b>Sectional Sessions</b>										
Aeronautical Ind.	Palmer H.		X				X			
Air Transport	Palmer H.				X				X	
Auto & Mach. Shop	Congress				X				X	
Cement & Quarry	Stevens						X		X	
Chemical	Stevens		X		X		X			
Coal Mining	Stevens		X		X		X		X	
Commercial Vehicle	LaSalle			X	X	X	X	X-jt.	X	
Construction	Stevens				X		X			
Electrical Equip't.	Stevens						X		X	
Food	Morrison				X		X		X	
Glass & Ceramics	Congress		X		X					
Industrial Nursing	Stevens & Palmer H.		X	X		X				
Marine	Morrison				X		X		X	
Meat Pkg.-Tng. & L.	Congress		X		X					
Metals	Stevens		X		X		X		X	
Mining	Stevens		X		X		X		X	
Petroleum	Stevens		X		X		X			
Power Press	Congress		X				X			
Printing & Publ'g.	Palmer H.				X		X			
Public Employee	Palmer H.		X						X	
Public Utilities	Stevens				X				X	
Pulp & Paper	Stevens		X		X		X		X	
Railroad	Morrison				X		X		X	
Rubber	Stevens				X		X			
Textile	Congress		X		X		X			
Traffic	Congress		X	X	X	X	X	X	X-jt.	
Transit	LaSalle				X	X	X	X-jt.		
Wood Products	Congress		X		X		X			
<b>Divisional Sessions</b>										
Farm	LaSalle			X	X	X	X			
Home	Stevens			X					X-jt.	
School & College	Morrison		X	X	X	X	X	X	X-jt.	
Women's Activities	Blackstone		X							
<b>A.S.S.E.—Subject Sessions</b>										
A.S.S.E. Ann. Mtg.	Stevens			X						
Subject Sessions	Stevens & Congress					X		X		X
<b>General Sessions</b>										
Annual Council Mtg.	Stevens	X								
Banquet	Stevens						X Eve.			
Early Morn. Sess.	Stevens			X		X		X		X





## Me and My Halo

(Fiction)

By BILL ANDREWS

May 1, 1951

It wasn't quite a lost-time case. The doctor sent the man home after he checked him over, and he was back at work this morning with only a slight limp and a bruise on his ribs.

Yet that petty case has consumed a lot of my time, my thinking ability, my energy—and it will take a lot more of all those things before I'm through with it.

And the case has brought up in sharp outline one of the problems of safety work—the sense of loneliness when you know what you have to do and can't be completely frank with any of the people you work with. I suppose that's characteristic of any job that requires any measure of brains and leadership. It is probably more often true of a top-rank

manager than it is of a safety director.

The man involved in the accident is a steamfitter. He was tightening a union on an overhead steam line with a pipe wrench. When he applied force to the wrench it slipped. He went forward, falling across his tool kit on the catwalk. The wrench hit the railing of the catwalk and dropped harmlessly beside him. So did the length of pipe he had slipped over the end of the handle.

The number of things that didn't quite happen is impressive. The wrench didn't fall to the shop floor, where it could have killed a man. The fitter didn't hit his head against anything. His arms and hands were undamaged. His ankle got a painful twist, but not a sprain or break. The pipe didn't

fall on the man, and neither did the wrench.

The good Lord is kind to fools—and in this case the number of fools who were lucky is very large. I'm one of them!

First of all, I didn't learn about the case for three hours. The company routine was followed with precision. But I was in a conference when the medical department's report came in. My secretary referred it to Jim Mason. He called the man's foreman to remind him about making his report, and in that call learned that the man's injuries were minor. And when I got back from the conference, Jim was busy and didn't mention the accident to me.

It was 4:30 before he tossed me the medical report supplemented with the information he'd gotten by phone. I grumbled a little about the delay, asked a couple of questions and told him to check on the case in the morning. I had a lot of other things on my mind that seemed more important.

I was in bed at home before I thought of the case again. And then I remembered several other facts that made the case seem important for the first time. The other facts that substantially delayed my sleeping were:

1. That in the last month we've had seven first aid cases involving hand tools used by maintenance men—and three of them involved pipe wrenches.

2. I haven't heard a word from either Jim Mason or Harry Dexter on the problem of hand tools in any of their inspection reports in six months.

3. Most important of all, I haven't done a single thing about the problem, for the simple reason that I haven't recognized it as a problem.

I can't excuse myself. It was drummed into me when I was a cub that accident prevention is not primarily a matter of elaborate protective devices, high-flown engineering brilliance, or generalized noise making. It is, my old boss at Monarch kept insisting, mainly a business of teaching people how to perform humdrum

little operations carefully.

Next morning, I put on my first act, for the benefit of my two assistants, Jim Mason and Harry Dexter. The role I selected was the somewhat grieved, very earnest, elder statesman, pointing out to my young men the grievous error of their underestimation of the importance of near-accidents and hand tool problems. Saying nothing of my own late awakening, I made it emphatic that the run of hand-tool incidents was so long that they could not, if they had been alert, have failed to notice bad practices.

I closed by announcing that I wanted an investigation of yesterday's accident as thorough as if it had been a fatal.

By eleven o'clock the boys and I had built up a dossier on the case that was impressive—and damaging.

The man was at fault, certainly. He had used a length of pipe as an extension of the handle of the wrench, putting excessive pressure on the jaws. Clearly, he should have gotten a larger wrench. Also he had worked under needlessly hazardous conditions. Instead of getting a step ladder from which he could have worked easily, he put one foot on the catwalk railing, another on the lid of his tool box. To him I spoke most sharply, taking the role of the indignant superior.

But supervision was also clearly in error. While I was walking through the department, I saw other men mishandling hand tools—including one who was using a pipe extension on a wrench handle. Clearly, laxness in enforcing safe working procedures was common, and supervision was to blame. But I also remembered that at no foremen's safety meetings in the last six months had the subject been raised by us. No memos had gone out on the problem. We had, as far as the three of us could remember, called no foreman on the point personally in that time.

So I had a basis for a squawk—again minimizing my own ignorance, but hammering to our maintenance foreman on his own short-

comings. Apparently he, like my assistants, wasn't conscious that he had every right to toss the blame, or a good share of it, back on me. He took my yammering with humility.

The final complication was the wrench itself. Its jaws were badly worn. Even without the pipe extension, I would have thought that ordinary pressure on it would have made it slip on pipe. What's more, the wrench was no old favorite of the maintenance man. It had been issued to him by the tool room within the last week, after he had broken the jaw of his old one.

When I beefed to Mike, the tool room boss, he shrugged, and tossed me a memorandum from the front office, demanding a tightening up on waste of equipment, pointing out that perfectly usable tools had been scrapped in the past, and holding Mike responsible for drastic economies through the reconditioning and reissue of tools.

With Mike, as with the maintenance foreman, I took the position of outraged virtue—I was the lordly outsider who might, in return for drastic reform, be persuaded not to make a stink to the high brass.

It apparently never occurred to Mike to ask why I hadn't brought the point up earlier.

Next stop was Larson's office. Larson, as vice-president in charge of manufacturing, is my immediate boss. My role shifted from that of beeper and superior critic to that of alarmed subordinate, pointing out to the top man the error of his ways, and the dangers to his welfare of a continuance of such practices. Specifically, I complained bitterly that Mike had been given such general instructions to reissue worn tools, without being warned emphatically against the hazards of an ill-considered application of these instructions.

Larson, too, was more meek than I had any reason to expect. He accepted responsibility and proceeded immediately to plan action. There were to be no hawl outs—"How can I yell at 'em,



when it's my fault," he said. But the point was to be raised in foremen's meetings, and it was to be made clear that foremen were to

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# HOLIDAYS COMING!

**Week ends, holidays and vacation trips cause a heavy toll of deaths and injuries among employees and their families. Here is a picture story of one company's pre-holiday program to focus attention on off-the-job safety**

**F**ACED with a long weekend in which 2500 employees and their families would be menaced by the hazards of traffic and recreation, the Bakelite Division of Union Carbide and Carbon Corporation at Bound Brook, N. J., launched an intensive off-the-job safety campaign just before the Fourth of July last year.

Dramatic exhibits and driving aptitude tests were among the measures planned to make employees safety conscious away from the job. The program was planned and executed by the safety department under the direction of L. B. Everett, safety director.

Employees entering the plant were confronted with a wrecked car loaned by a local garage. In the plant cafeteria was a collection of photographs, some of them on the gruesome side, contributed by the state and municipal police.

The driving aptitude tests, made available by the Plainfield Area Safety Council and the police department of that city, fascinated many employees who were anxious to try out their skills. The tests covered were reaction time, visual acuity, distance judgment, field of vision, night vision, glare resistance, steadiness, color vision, and eye dominance.

Station WCTC, New Brunswick, N. J., visited the plant with a portable mike and interviewed many employees to get their views on safety. A transcript of the interviews was broadcast on the Station's program, "Let's Go Visiting."



**ON THE AIR.** J. J. McCarthy, of the Safety Department, explains the safety exhibit for listeners of WCTC.

**L. B. EVERETT, safety director, tells of program** to make employees safety minded.



**LEAVING for a long weekend, an employee** gives his reaction to the safety display.





**A WRECKED CAR** was an impressive exhibit near the main gate.  
**Right: Press photographer Remson Kenton of Daily Home News** mounts a stepladder to get a good view.



**PICTURE DISPLAY** of serious traffic accidents told some gruesome stories.



**STEADINESS TEST.** Taking the various tests of qualifications for safe driving proved to be fascinating to both spectators and those being tested.

**JUDGING DISTANCE.** Driver is required to line up three cars in a straight line, observing their movements in a mirror some distance from table.



**PERIPHERAL VISION** test by Ted Hyers, safety supervisor.



# Records That Work for Safety

By THOMAS J. BERK

**Medical records are seldom adequate for safety department use. These forms furnish other visual data**

ALL accident records, excepting those of a purely medical nature, should be maintained in the safety department and utilized by the safety director to determine corrective measures and plans for his preventive program. A record of the daily occurrence of accidents is important as a working guide for the safety director and to facilitate his preparation of periodic statements of accident causes, locations, trends, etc., as well as studies of departmental and plant experience.

In maintaining such records, many advantages are possible through the use of code numbers on the personnel cards kept in a plant hospital. For example, the accident experience or details concerning a particular accident involving the employee can be determined by a glance at his individual card. Special analyses incident to lost-time causes, locations, etc., are facilitated by arranging the cards solitaire fashion according to desired groups. This may also be accomplished by a tickler system.

Other advantages that may be derived from the use of this record in the manner suggested include:

1. Development of a permanent running account of employee accidents by departments.
2. Development of accident-prone studies of employees; tabulations according to causes, units; or other desired statements.
3. Elimination of considerable clerical work, non-essential entries, and repeating of items.

THOMAS J. BERK is Assistant Director of Safety, Metropolitan Life Insurance Company, New York.

4. Checking of workmen with undesirable accident tendencies when re-employment is considered.

5. Simplification of the maintenance and operation of the plan.

6. Providing of a cross-index to suggested classification of accident causes.

## Statement of Disability and Medical Release

When an industrial illness or injury occurs, a statement concerning the immediate status of the employee and the possible disposition of his case is desirable. This information is necessary for the proper maintenance of both accident and medical records. However, in addition to having a check on medical treatments received and days lost by employees, it also is important to have certain information covering the exact nature of injuries or illness, possible loss of time, and other data in order that proper safety measures and operating arrangements can be effected at once.

Form "A" suggests a method whereby cases of accidental injury or illness incurred while at work are handled to the advantage of the employee, the physician or nurse, and the company. A plain card about 6" by 6", detachable at the middle, can be used. The plan utilizes both sides of the card, two sections of the form appearing on the front and two sections at the back. The practice of an employee reporting immediately to the medical department when injured is strongly recommended.

In cases of minor injury when an employee is able to resume work and no redressing or subsequent visits are necessary:

- A. The nurse should:
  1. Complete Sections 1, 2, and 4.

2. Strike out "Safety Director" and "home-hospital" on Section 1.

3. Indicate the nature of either accident or illness on Section 3 and strike out "has been absent since."

4. Indicate either injured or taken ill on Section 4 and strike out "and absent since."

5. Strike out "work of a nature lighter than his regular duties."

6. Send the entire form to the employee's foreman.

B. The foreman should:

1. Note any additional information he requires to complete his Foreman's Report of Accident.

2. Enter time, date employee again began work, as well as his remarks, if any, on Section 3.

3. Forward the upper part of Form "A" Sections 1 and 3 (together with his report of the accident), to the safety director.

4. Return the lower part of the form, Sections 2 and 4, to the medical department.

C. The safety director should:

1. Note all information required to complete his records.

2. Investigate the accident and/or arrange for its investigation by a committee appointed for this purpose.

3. Fasten Sections 1 and 3 to any papers relative to this particular accident and place them in the employee's accident folder.

If the employee is permitted to resume work, but is instructed by the medical department to return on subsequent days for re-dressings or other treatment, the same procedure is followed, except that the nurse retains the lower portion of Form "A", Sections 2 and 4. The fact that the man may continue work, but is to return at prescribed times to the medical department or to an outside doctor will be indicated to the foreman, as well as the safety director, in the remarks of Section 1. When the employee no longer is required to report to the medical department, the foreman is advised of the employee's release from further treatment by Sections 2 and 4. After initialing Section 4, the foreman should return this part of the



**STATEMENT OF DISABILITY**

To: Safety Director  
 Re: (Foreman's name) \_\_\_\_\_ Dep't. \_\_\_\_\_  
 (Foreman's name) \_\_\_\_\_ Clock No. \_\_\_\_\_ reported to the  
 plant hospital at \_\_\_\_\_ A-M on \_\_\_\_\_  
 P-M on \_\_\_\_\_

Section 1  
 Presenting length of disability \_\_\_\_\_  
 Sent to - Work - Home - Hospital or \_\_\_\_\_  
 Remarks \_\_\_\_\_  
 \_\_\_\_\_ H.D. (Burse)

**TREATMENT RECORD**

A - Admission	C - Operation
D - Dressing	B - Re-dressing
E - Examination	(suggested) D - Special
G - Home Visit	T - Transfusion
L - Hospital	X - X-ray

Section 2  
 Nature of disability \_\_\_\_\_  
 Remarks \_\_\_\_\_

Form "A" — Front

**NOTICE OF RETURN TO WORK**

To: Safety Director  
 Because of an accident - illness - incurred at work on \_\_\_\_\_  
 (Name), this employee - lost no time - has been absent  
 since \_\_\_\_\_ 10:00 AM. He was released for work on \_\_\_\_\_  
 10:00 AM, and began work at \_\_\_\_\_ A-M on \_\_\_\_\_  
 10:00 AM

Section 3  
 For all short  
 Remarks \_\_\_\_\_  
 Date \_\_\_\_\_ 10:00 AM \_\_\_\_\_ H.D. (Burse)

**MEDICAL RELEASE**

To: (Foreman's name) \_\_\_\_\_ Dep't. \_\_\_\_\_  
 To Medical Department, \_\_\_\_\_  
 In my opinion, \_\_\_\_\_  
 injured - within 101 - at work on \_\_\_\_\_ Clock No. \_\_\_\_\_  
 absent since \_\_\_\_\_ 10:00 AM - is now able to resume - his  
 regular work - same or a lighter one than his regular duties. He  
 should be relieved of \_\_\_\_\_  
 Return for examination on \_\_\_\_\_  
 Remarks \_\_\_\_\_  
 Date \_\_\_\_\_ 10:00 AM \_\_\_\_\_ H.D. (Burse)

Form "A" — Back

form immediately to the medical department.

### Disabling Injuries

In the event an employee is unable to resume work or if the disability is such that the employee may lose time other than that day or shift during which the accident or illness occurred:

A. The nurse should:

1. Enter foreman's name, department, employee's name and clock number, the hour, and date of first treatment on Section 1, leaving other entries of this section for completion by the doctor.
2. Indicate on Section 3 whether accident or illness, and the date it occurred.
3. While convenient, enter on Section 4 such items as employee's name and clock number, date when the injury (or illness) actually occurred, and first day of absence by the employee.
4. Send Section 1 immediately to safety director when completed by the doctor.
5. Forward Section 4 to foreman concerned when employee is released for work by the doctor.

B. The doctor should:

1. Indicate on Section 1 his diagnosis, probable length of disability, disposition of employee, and any remarks he considers pertinent.
2. Return Section 1 to the plant nurse with the employee, the person who accompanied him, by mail, or personally (Note: If no more than one visit to the doctor is necessary, the doctor, after entering the treatment given on Section 2 and properly completing Section 4, also should re-

turn these sections with Sections 1 and 3).

3. Retain Section 2 in serious cases, such as those requiring subsequent visits or hospital care, making current entries in the treatment record during convalescence of employee.

4. Release employee when able to resume work, completing Section 4 and returning it to the plant nurse. (Note: If subsequent visits to doctor later are warranted after release of employee for work, plant nurse should send Section 2 to doctor for additional entries in treatment record.)

C. The safety director should:

1. Immediately investigate accident upon receipt of Section 1 from the plant nurse.
2. Discuss the circumstances with the foreman and obtain his accident report from him.
3. Leave Section 1 with foreman.
4. Arrange for thorough investigation.
5. File Section 3, when received from foreman, with other papers relating to the case in the employee's accident folder.

D. The foreman should:

1. Retain Section 1.
2. Obtain all facts regarding the accident and complete his accident report if he has not already done so.
3. Return Section 3 properly completed to safety director when Section 4 is received from medical department.
4. Initial Section 4 and return it to plant nurse.

It probably would prove helpful if the medical department also maintained a small index cabinet for filing the lower part of Form "A." If the cards were filed alphabetically according to the department and the closed cases sepa-

rated from those pending, an arrangement consistent with that suggested for good accident recording systems would be provided. In the use of Form "A" several advantages are believed possible. It serves to:

1. Maintain a constant check on status of employees incurring occupational accidents or illnesses.
2. Give necessary information for guidance of safety department in recording accidents and preparing statements of accident experience.
3. Provide a system for determining actual days lost from accidents.
4. Prevent employees and other persons from receiving unauthorized treatment in the name of the company.
5. Prevent return to work before employee is physically able to do so but permit undertaking of lighter duties when desirable.
6. Overcome malingering.
7. Impress foremen and supervisors with their responsibilities.
8. Furnish a brief factual record of a disability, information which may prove extremely helpful before a compensation board or court of law.

Form "A" is not prepared as an inclusive medical record of a disability, but rather as a medium to coordinate information essential to both the medical and safety departments. Although the form would eliminate a certain amount of clerical work performed by a plant nurse, no conflict is intended with whatever additional records that are important for maintaining necessary medical information.



**Demonstrate**

## **POLE-TOP RESUSCITATION**

**DEMONSTRATION** of technique of pole top resuscitation by a first-aid team of the Public Service Company of Northern Illinois. Clyde Larson, the "victim" has just touched a "hot" wire and dangles from safety belt. Other crew members see his plight and go into action.

**LOWER LEFT:** Bill Bohannon climbs pole, swings Larson around, and applies artificial respiration. Meanwhile, another member of the crew, Art Truelson (extreme left) adjusts spurs and gets ready to go up to help.

**LOWER RIGHT:** Truelson makes sure the rubber protective equipment is in place, removes victim's spurs and throws headline over crossarm. The line is then tied around Larson's body. Bohannon continues resuscitation.



**W**HEN RESPIRATION is suspended, the victim's life may depend on the promptness with which resuscitation is started. Even seconds count.

When a member of a line crew on a pole is a victim of electric shock, these valuable seconds—even minutes—might be lost before he could be lowered to the ground and prone pressure resuscitation applied. For such emergencies, the pole-top technique has been developed.

The object of the pole-top technique is to raise the abdominal organs against the diaphragm. To do this, the operator encircles the waist of the victim with his arms, placing both hands on the abdo-

men, thumbs below the lower ribs and fingers touching. With his hands and arms, the operator compresses the victim's abdomen in an upward motion.

At the finish of the stroke, the hands are cupped, with the fingers depressing the abdomen under the breast bone. Pressure is then quickly released and reapplied at a frequency of 12 to 15 per minute, until the victim regains consciousness or until fellow workers are ready to lower him to the ground where the Schafer prone pressure method can be applied.

Efficiency in the pole-top technique requires careful training and constant practice.

An impressive demonstration of

this life saving technique was staged at the Management Conference in Chicago, November 28, 1950. For this demonstration the Public Service Company of Northern Illinois brought all the paraphernalia into the grand ball room of the Palmer House. A first-aid team from the company's Northern Division put on the demonstration.

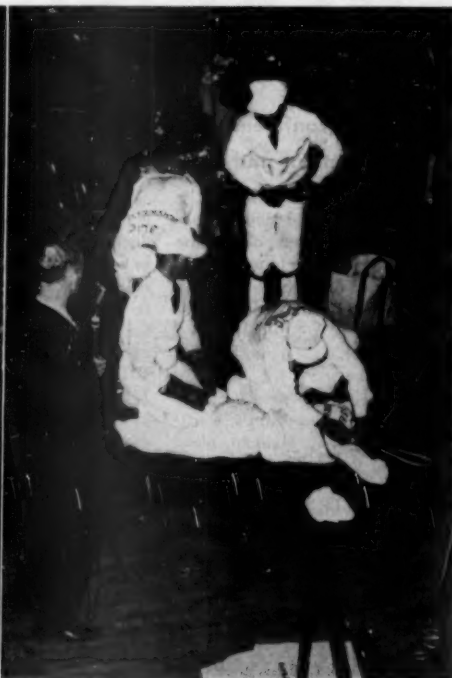
With Joe Lambert of the company's industrial relations department at the microphone as narrator, the first-aid team pantomimed the procedure used in such an emergency.

Photos of the demonstration are reproduced here through courtesy of *Public Service News*.

**AT A GIVEN SIGNAL**, Bohannon swings free, Russ Bartz (right below) cushions Larson's descent with rope, and Bill Onderdonk guides Larson to the ground. This is done quickly so that the resuscitation cadence is unbroken.



**THE BOYS** on the ground meanwhile had called a doctor and obtained first-aid equipment from the truck. Prone pressure resuscitation is carried on while the rope is being removed. When victim regains consciousness he is treated for shock and burns. Joe Lambert is narrator at microphone.





ACTUAL machine that figured in accident is put through paces, as Mr. Haugan (second from right) leads discussion.

## FOCAL POINT

**Give conferees a point of interest to focus attention—and discussion will stay in line**

**E**VERY conference leader probably has fretted about the tendency of the conference technique to lead off into blind alleys and irrelevant fields and the failure, at times, to get the undivided attention and participation of every conferee.

Many accident prevention conferences have suffered these shortcomings, but J. R. Haugan, plant engineer of the Union Special Machine Company, Chicago, has found a device that aids in driving directly to a conclusion, representing the thought of all participants, by providing a point of focus for the discussions.

This focal point, in a typical supervisors' conference on accident prevention at Union Special,

is a machine—taken from the production line because it has figured in a disabling injury. There, right before the audience and beside the conference leader's platform, the offending machine is installed and connected for operation.

The supervisors' conferences are held on the third Tuesday of each month, in three sections to accommodate all shifts. On a recent third Tuesday Mr. Haugan reviewed an accident in which a woman operator of a Cincinnati 008 mill lost the tip of one left finger and lacerated another on the milling cutter.

After this brief introduction, he asked one of the foremen to turn on the switch and put the machine through its paces, describing the

motions of the operator in normal work operations.

Mr. Haugan then finished relating the essential facts about the accident. He said a rumor that the machine had been known to repeat its cutting cycle without being tripped was investigated thoroughly and judged to be without foundation. Experts in the shop had been unable to discover any possible combination of circumstances that would make the machine repeat.

The woman was running a slotting operation on small parts, which were clamped in a vise on the carriage. Supervision had reached the machine promptly after the accident, while the motor was still running. The piece was still in the vise and the cut was perfect. The carriage was at rest in normal return position.

The distraught woman could not relate just how the mishap had occurred. In fact, the exact cause of the accident could not be determined in the formal investigation, nor in the investigative phases of the conference. A mys-

terious element was found in the fact that, although the tip of one finger had been torn off, lacerations on the next finger bore the distinct tooth marks of the cutter, as though the hand had been forced against a stationary cutter. In normal operation, however, the cutter is always turning at 178 rpm during the power cycle of the carriage.

The operator stands at her work. The accident had occurred at 11:20 p.m., ten minutes before lunch time.

The efficacy of the machine demonstration was proved as the conference discussion got under way, and each supervisor's eyes were focussed on the offending cutter. As salient points were brought out by the different conferees, with Mr. Haugan writing each point on the blackboard, one foreman after another called for the operating foreman to start the machine again, in order that a certain point might be studied.

First points to be enumerated concerned the essential facts of the operation. Facts set forth were that it was a climb-milling, slotting operation, that permitted much idle time for the operator between cycles. Clearance to cutter was adequate. Trip is operated by right hand. The operator was right-handed. Tests proved the machine could not have repeated. Machine must have been tripped

for a cutting cycle—but how?

At this point one of the conferees injected a new thought that had not been considered by the investigators: What was the operator's stature?

"In other words," he continued, "could her stature have caused her to reach awkwardly, or take a step to reach material, when she might have stumbled?"

(It was learned subsequently that the operator was of normal stature. The material bin was within easy reach of the right hand.)

The operator's emotional state was next considered. Was she worried? Could she have been so confused that she inadvertently operated the wrong lever? It was brought out that she was an experienced operator and was considered well-adjusted emotionally.

"Could she have been trying to adjust the coolant hose during a cycle?" another asked. Study of the demonstrator machine failed to show how this possibility could have caused the accident. Possible changes in the coolant hose position were not considered advisable.

Mr. Haugan then turned the discussion to possible preventive measures—how to keep the operator's hand out of the cutter. The conferees agreed that climb milling was necessary with this particular operation, in order to hold the small piece in the vise, and to

prevent burrs, even though conventional milling would tend to push the operator's hand away from the cutter.

Each of the three sections of the conference came to the same conclusion: that two-hand control was the only way to keep the operator's hand away from the cutter.

The actual method was worked out at the evening session, when various locations and types of controls were studied. Many of the possibilities were discarded because they would slow the operation unnecessarily and increase cost of the parts. Final solution, the simplest possible, again resulted from conference study of the machine in operation.

Since it was agreed that a normal resting position for the left hand, during the cutting cycle, would be on the handle of the clamping device, all future tooling for such operations would place the vise handle for left-hand operation. The right hand would load the fixture, then move to the tripping lever, which, in every case, is placed for right-hand operation.

There are 50 or so similar milling machines in the plant. Peculiar features were weighed, objections were met and the final recommendation was that all such machines be converted by the simple expedient of tooling for left-hand operation of the vise, and for right-hand loading and tripping.

DEMONSTRATOR places left hand at point where injury was suffered, right hand on tripping lever of the machine.



Points brought out by supervisors during discussion are recorded on blackboard; aid in reaching conclusion.





The 3 E's of Safety—Education, Engineering and Enforcement—are whimsically illustrated by stickmen made of pipe cleaners and beads.

## Safety's Little Teachers

By HORACE E. HEDGES

**"Stickmen" made of pipe cleaners and wooden beads, with simple backgrounds, provide effective safety dioramas**

**P**PIPE CLEANERS, wooden beads, wood scraps, cardboard, and painted odds and ends offer almost endless opportunities for preparing displays that teach a lesson.

From these simple materials, Glenn Brado, district forest ranger at Ketchum, Idaho, has fashioned a number of ingenious tableaux, each dramatizing an impressive lesson on some phase of safety connected with the forest service.

At Ketchum, located in the rugged Sawtooth Mountains, Ranger Brado has the responsibility of supervising forest workers who are exposed to a wide variety of hazardous conditions. The work ranges from forest fire fighting in

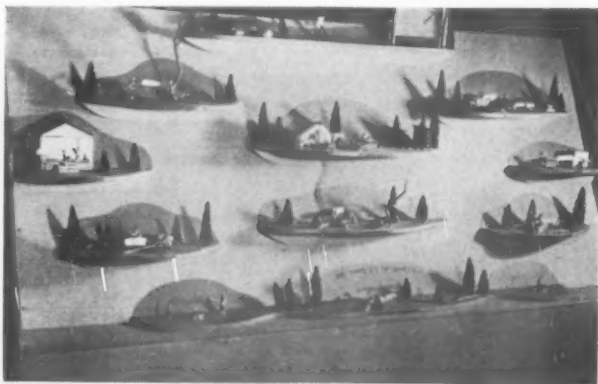
summer to long trips on skis through avalanche country in the winter to make game counts and snow surveys.

Under these conditions, close personal supervision is impossible. Safety requires thorough training in the various jobs and their hazards and the development of safety consciousness in the individual.

To bring home to each worker

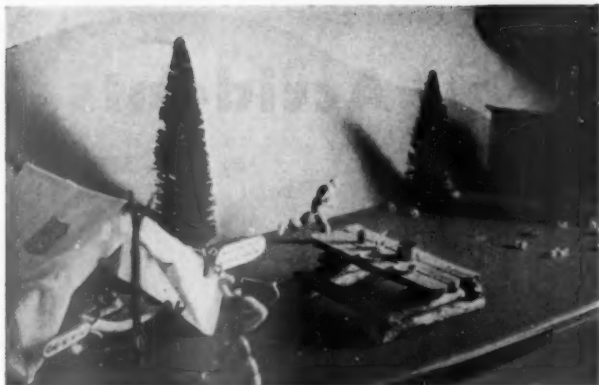
the need for eternal vigilance, Ranger Brado has used these "stickmen" to dramatize the results of failure to observe well-known safe practices. They offer innumerable opportunities for humor to attract interest.

With the stickmen and the simple material for backgrounds, all types of situations and conditions can be portrayed. Exaggeration



A COLLECTION of these three-dimensional posters arranged for exhibits at a meeting. Stickmen and simple stage props can tell a safety story quite effectively.

HORACE E. HEDGES is Safety Officer for the Intermountain Region of the U. S. Forest Service, Department of Agriculture. The stickmen described in the article and shown in the illustrations will be on display at the annual Western Safety Conference to be held in Salt Lake City, June 21-23, 1951.



CAMP SANITATION is the theme of this display.

can be used effectively to emphasize certain points.

It is interesting to see how much action and expression can be brought out with these simple models. Surprise, pain, disgust, and many other human feelings can be portrayed quite feelingly.

Even such a simple arrangement as a stickman pointing to an announcement can be much more eye-catching than when the bulletin is merely mounted on a board or wall.

The familiar "3 E's" of safety are whimsically illustrated in the three scenes shown here. "Education" by the schoolroom scene; "Engineering" by the surveyor with the transit; "Enforcement" by the application of the tradi-

tional form of parental punishment.

Camp sanitation and the necessity of precautions in food handling is the theme of another display which shows one worker on a cot doubled up with abdominal cramps while another is losing no



THIS SIMPLE method gives emphasis to the safety message.



PROTECTIVE HATS guard workers against one of the serious hazards of the woods—the "widow makers"—the heavy falling limbs that menace heads.

time getting to the camp's sanitary facility.

Almost every situation and problem on the job can provide a subject for this type of treatment.

## Opportunities for Lengthening Life

Further increases in the average length of life in the United States depend largely upon the reduction or postponement of deaths from the chronic conditions, especially the diseases of the circulatory system and cancer, according to Metropolitan Life Insurance Company statisticians.

By contrast, the 19-year gain in the average length of life over the past 50 years can be attributed for the most part to reduction in mortality from the infectious diseases—notably pneumonia, influenza, tuberculosis, and the communicable diseases of childhood.

The elimination of the heart and blood vessel diseases as a cause of death would increase the expectation of life at birth almost 10 years for men and 9 years for women. And the elimination of cancer would add almost 2 years for men and 2½ years for women.

"It is, of course, unrealistic to talk of wiping out the cardiovascular-renal diseases," the statisticians point out, "yet it should be remembered that they are responsible for more than 200,000 deaths a year under age 65. If most of these deaths could be postponed until later years, the expectation of life would be increased appreciably."

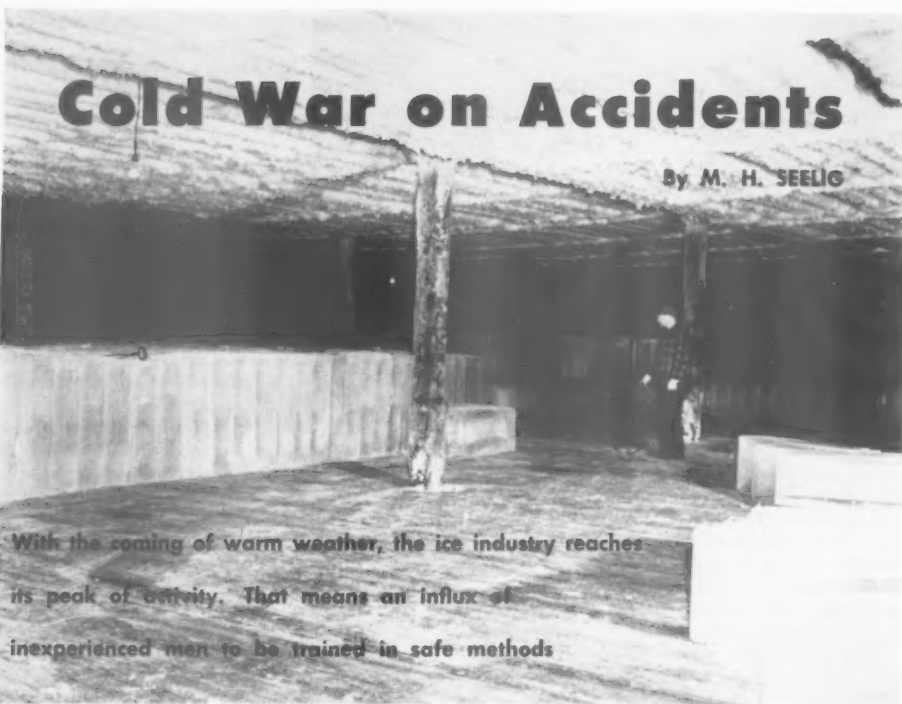
Among men, as many years would be added to life by eliminating accidents as by eliminating cancer, although the mortality rate from cancer is considerably higher. The explanation is that a larger proportion of accidental deaths occur at the younger ages, and hence the average number of years saved by eliminating accidents would be greater.

The futility of riches is taught very plainly, both in the Bible and in the income tax forms.



# Cold War on Accidents

By M. H. SEELIG



With the coming of warm weather, the ice industry reaches its peak of activity. That means an influx of inexperienced men to be trained in safe methods

Cold, heavy, slippery blocks of ice in storage ready for icing refrigerator cars that make it possible to ship foods long distances.

A block of ice rides the conveyor, but ice still requires much manual handling. (Photos courtesy Atlantic Coast Line Railroad Company.)



THE crystal clear block of ice has an innocent look. Its purpose is to preserve food and refresh jaded palates, yet its career has been marred by accidents to the people who have worked in this industry.

Still, there has been much progress in safety since ice was first harvested from lakes and rivers. In those days men were cut by sharp saws, caught in the jams as blocks were floated ashore, and, not infrequently, drowned. The modern industry, which today makes ice by the process of refrigeration, has eliminated most of the hazards and encourages men to work and drive safely.

In most sections of the country, with the coming of the first warm weather, the peak demand for ice is quickly reached. Activity begins before plant workers and

M. H. SEELIG is Safety Director, City Products Corporation, Chicago.

drivers on delivery routes, even the year-round men, become adjusted to the quickened pace. At that time there is an influx of inexperienced help to be trained in safe ways. Injuries occur, however, before the ice manager has an opportunity to control the situation.

In its accident prevention work, the industry now appeals to the self interest of an employee directly. The National Safety Council slogan "The Life You Save May Be Your Own" is typical of the ice industry's approach. While rules are established and obedience to them is demanded, the safety objective is reached primarily through teaching, guidance and suggestion. Proper training in the early stages means the difference between a safe worker and one who always will be plagued by injuries. The follow-through to keep men safe rests largely on the supervisor.

Let's take a quick look at the mechanical brains which transform purified water into ice. The key machine in the engine room is the compressor, which compresses the ammonia gas and continues it on the cycle to the condensers where it is cooled and

Right: A few of the precautions observed in the iceman's routine.

Below: Watching their step must become second nature to the men who feed the ice into the bunkers of refrigerator cars.



**JOE CHECKS TIRES DAILY**



**JOE KEEPS WINDSHIELD CLEAN**



**JOE CHECKS GAS, OIL AND WATER EVERY DAY**



**JOE KEEPS TONGS, ICE BAG OTHER TOOLS IN PROPER PLACE**



**JOE LOADS TRUCK WITH CARE...KEEPS FLOOR OF BODY CLEAN AND DRY...ALWAYS KEEPS ICE WELL COVERED**



condensed to a liquid. The pressure is then reduced and the liquid changes to a gas in the coils below the floor of the tank room to refrigerate the water in the cans. After the water in the tank cans is frozen they are lifted by crane and carried to a dip tank where the ice is thawed from the cans and dumped on a chute, which takes the blocks to the storage room. The engineers are constantly on guard to discover ammonia leaks in the complicated systems of pipes and valves. An efficient gas mask is always handy near an exit. Belts, shafts and moving parts are protected with guards.

—To page 95

# CAUSE AND CURE



These examples are from reports of actual accidents. They list the causes and the steps taken to prevent recurrence.



## Gloves in the Way

Employee was cleaning shavings from around a big drill, when one of the cotton gloves he was wearing caught in the drill, twisting and lacerating his finger.

**Correction:** Men were told that they should not wear gloves while working with machine tools, and that shavings should be removed with a brush, not by hand.



## A Costly Swing

Before receiving instructions from the strip boss, a newly-hired man started to limb a tree on his side of the log. He made a swing at a limb, missed, and cut into his left instep, severing two tendons.

**Correction:** New employees were told that they should not start out on a job until they have been properly instructed by their foreman.

## Bruised Foot

Worker was oiling the wheels of a four-wheel hand truck. The truck was insecurely placed and fell over on the instep of his left foot, severely bruising it.



**Correction:** Employees were instructed to be certain that all objects are securely placed, before being worked on. Supervisors were told to check work habits of new employees to see that they are performing their duties properly and safely.

## No Signal

While employee was helping to install a long pipe, fellow worker at other end of pipe released his end, jamming hand of the employee, who was still holding pipe, against a wall bracket.



**Correction:** Employees were told that when two or more men are handling cumbersome objects, an understanding between them is essential before anyone releases his hold.



## Forgetful

Operator of tug going to aircraft to unload mail stopped his tug to permit another tug to clear after loading. He stepped down from tug, forgetting to set brakes. The tug rolled forward, breaking the antenna wire on the plane.

**Correction:** All tug operators were called in for reorientation and training.



## Unauthorized

A maintenance employee was operating a tractor without authority. Attempting to get down from the vehicle, he caught his foot on part of the mechanism. To keep from falling, he jumped and injured himself.

**Correction:** An order was issued to the effect that only authorized and licensed drivers were to operate plant vehicles.

# SULFURIC ACID

Published by National Safety Council  
425 North Michigan Avenue, Chicago 11

## Properties and Uses

1. Sulfuric acid,  $H_2SO_4$ , is a sirupy liquid ranging from clear to cloudy and varying in color according to the purity. At ordinary temperatures it is nonvolatile. Strong sulfuric acid or oleum ( $H_2SO_4$  in which  $SO_3$  is dissolved) has a sharp, penetrating odor.

2. Sulfuric acid is rapidly corrosive on active metals at concentrations below 60 degrees Baume (78 per cent) and releases hydrogen gas. The hydrogen may be a fire hazard in the handling of sulfuric acid shipped in metal containers. Some hydrogen should be expected in any metal container as offered, no matter what the concentration at which it has been shipped.

3. In concentrated form, sulfuric acid is a strong oxidizing agent, reacting with many organic materials and with inorganic reduc-

This Data Sheet is one of a series published by National Safety Council. It is a compilation of experience from many sources. It should not be assumed that it includes every acceptable procedure in its field. It must not be confused with American Standard Safety codes; federal laws; insurance requirements; state laws, rules and regulations, and municipal ordinances. Reprints of Data Sheets are available from the National Safety Council.

ing agents to evolve considerable heat. It is also extremely avid for water, so that it will decompose many oxygen-containing organic materials by dehydration, and addition of water to the concentrated acid will produce violent steam explosions. The concentrated acid, since it has a high boiling point, should be diluted by being poured into water.

4. The acid is commercially available in a variety of strengths. The physical data on several representative commercial grades are given in Table I.

5. Sulfuric acid is widely used in industry. The chemical, paint and pigment, rayon, explosives, petroleum refining, textile, fertilizer, and iron and steel industries are among those using it.

## Hazards

6. The principal hazard is from contact of the acid with body tissues which may be burned or charred and destroyed, depending upon the extent of the contact and the strength of the acid. Repeated exposure to low concentration may result in dermatitis.

7. Extreme care must be taken to protect the eyes from splashes of acid. Destruction of eye tissue is extremely rapid, and total loss of vision may occur.

8. Vapor or mist from oleum or hot strong sulfuric acid is extremely irritating to the upper respiratory tract. Sensitivity to the vapor is variable: 0.125 to 0.50 ppm may be mildly annoying, 1.5 to 2.5 ppm definitely unpleasant, and 10 to 20 ppm unbearable. The American Conference of Governmental Industrial Hygienists has suggested a threshold limit of 1 milligram per cubic meter (0.25 ppm), undoubtedly for comfort rather than for health protection.

9. Continued inhalation of an irritating amount of the vapor from sulfuric acid may cause a chronic bronchitis, as with other irritants to the respiratory tract. No real systemic effects have been

TABLE I

Baume	Percentage of $H_2SO_4$	Specific Gravity	Freezing Point C (F)	Boiling Point C (F)
50	62.18	1.5263		146.1 (295)
52	65.13	1.5591	-64.4 (-84)	
58	74.36	1.6667	-43.9 (-47)	
60	77.67	1.7059	-7.8 (18)	196.7 (386)
66	93.19	1.8354	-33.9 (-29)	281.1 (538)
—	98.	1.8437	2.8 (37)	
—	100.	1.8391	10.3 (50.6)	340 (D) (644)
20% Oleum	104.50	1.915	-5.6 (22)	
30% Oleum	106.75	1.952	18.9 (66)	
40% Oleum	109.00	1.983	32.9 (91)	
65% Oleum	114.63	1.992	3.9 (39)	

(D) — decomposes

reported except for those resulting from damage to tissue caused by relatively high concentrations.

10. Although the acid is not flammable, it must be isolated from organic materials, nitrates, carbides, chlorates, and metal powders. Contact of high concentrations of sulfuric acid with these materials may cause ignition. Contact of high concentrations of sulfuric acid with metallic sulfides may cause both evolution of hydrogen sulfide and ignition.

11. Sulfuric acid in drums, tank cars, and metal storage tanks evolves hydrogen. Inasmuch as approximately 4 per cent to 75 per cent of hydrogen by volume with air forms an explosive mixture, open lights, flames, and spark-producing tools and equipment should be forbidden in the vicinity of such containers.

### Shipping

12. Since the Interstate Commerce Commission classifies sulfuric acid as corrosive liquid, containers used to transport the acid by rail, water, or highway must conform to ICC specifications.

13. Drums or boxes containing bottles must carry the ICC white acid label. Tank cars and railway cars transporting sulfuric acid must bear the ICC *Dangerous* placard.

14. The usual shipping containers and limitations are as follows:

- a. Wood-boxed glass bottles of 1 pound and 9 pound capacities.
- b. Wood-boxed glass carboys of 13 gallons and 6-1/2 gallons for acid containing not over 100.5 per cent  $H_2SO_4$ .
- c. Metal drums (55 gallons maximum), single trip and returnable, for acid of 77.67 per cent  $H_2SO_4$  (60 degree Baume) or greater strength, provided that the corrosive effect on steel measured at 100° F is no greater than that of 66° Be acid.
- d. Lead-lined returnable barrels for acid not over 93.2 per cent  $H_2SO_4$ .
- e. Tank cars for acid 65.13 per cent  $H_2SO_4$  (52° Be) or greater strength.
- f. Rubber-lined tank cars for acid

not over 1.4 specific gravity (42° Be).

- g. Tank trucks for acid 65.13 per cent  $H_2SO_4$  (52° Be) or greater strength.

### Handling

15. *Carboys.* Boxed glass carboys are safe when properly handled. Employees who handle them should be well trained and suitably clothed. (See paragraphs 36 through 38). On receipt, carboys should be carefully inspected and damaged containers set aside for special handling.

16. Before attempting to move a filled carboy, employees should check the closure to be sure that it is securely fastened. Specially designed hand trucks are recommended for transporting carboys. They should never be "walked" on the bottom edges or grasped by the neck.

17. Employees should wear face shields and rubber gloves when opening carboys. A wire cutter should be used to remove the wire which holds the stopper in place. No attempt should be made to loosen the wire by twisting or prying.

18. Carboys should never be subjected to air pressure. They should be emptied by use of a tilter or a self-starting siphon of acid-resistant material. The Interstate Commerce Commission requires that empty carboys be completely drained before return shipment, and all drops or spills should be carefully flushed off the carboy and its container before it is moved.

19. Drums should be inspected for loose plugs, which should be tightened, for leakage, and for bulging. Damaged drums should be set aside for special handling. If a bulged drum is found, the shipper should be notified immediately and asked for advice before employees attempt to handle it because the pressure causing the bulge may be sufficient to burst the drum. This pressure may build up if drums are delayed for a long time in shipment and are not vented.

20. To remove drum plugs, a pipe wrench or a plug wrench with a long handle should be used. Employees should wear face and hand protection. The plug should be turned very slowly for one full turn, and accumulated pressure should then be permitted to vent itself. After the pressure is released, the plug may be further loosened and removed.

21. Drums of sulfuric acid should be emptied by gravity or with a safety siphon—never by pressure. Since the drums may contain hydrogen gas, open flames or other sources of ignition should be kept away from them and they should never be struck with a spark-producing tool.

22. *Tank cars.* Unloading should be conducted and supervised by carefully trained employees. The car should be on a level track and blocked to prevent movement. Throughout the unloading operation the car should be protected with derailed or closed and locked switch and by standard blue warning signs.

23. The shipper's instructions for unloading should be followed carefully, and all precautions stenciled on the car and the dome must be observed. It is especially important that the pipe caps on the dome be opened in proper sequence.

24. The safety vent should be opened first. If there is a hissing sound, indicating pressure in the car, the vent cap should not be completely removed until the pressure has been reduced to atmospheric.

25. The acid discharge cap also should be opened cautiously. The discharge line within the car may be plugged, and pressure may be generated under the cap even when the pressure in the car as a whole has been reduced to atmospheric.

26. Compressed air used for emptying a tank car must be as free as possible of oil, moisture, and foreign material. Use of an

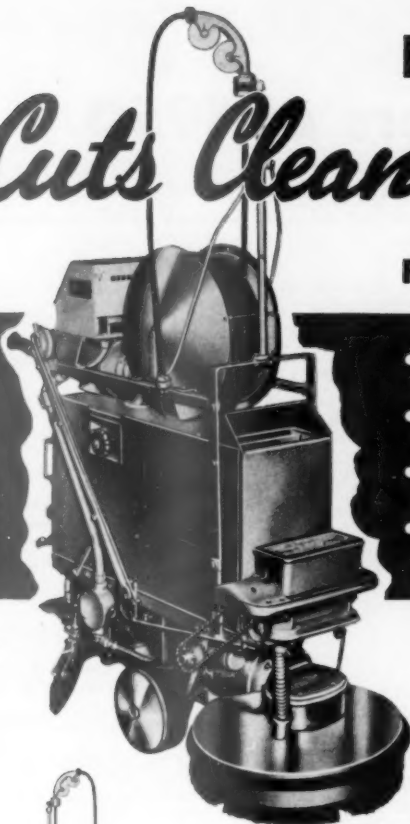
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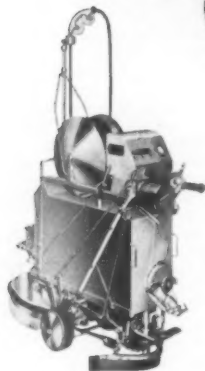
# NEW SCRUBBER-VAC

## Cuts Cleaning Time $\frac{2}{3}$

### FOR SMALL-AREA FACTORIES



- Specially designed for buildings with 2,000 to 15,000 sq. ft. of floor space
- Applies the cleanser, scrubs, rinses, and picks up in ONE operation
- Also handles the dry work — steel-wooling, polishing, et cetera
- Can be leased or purchased (leasing budgets cleaning expense)



Now the labor-saving advantages of combination-machine-scrubbing are available to small as well as larger factories. The new 418P Finnell Scrubber-Vac, for small-area buildings with 2,000 to 15,000 sq. ft. of floor space, cleans floors in *approximately one-third the time* required with a conventional 15 or 18-inch scrubber-polisher using separate equipment for picking up. A Finnell Scrubber-Vac speeds cleaning by handling four operations in one! It applies the cleanser, scrubs, rinses if required, and picks up (damp-dries the floor) — all in a single operation.

Of narrow design, the new 418P Scrubber-Vac also meets the need in larger factories for a combination machine that can be used in congested areas and narrow aisles. And all the refinements of Finnell's larger combination machines are embodied in this smaller unit (18-inch brush ring). Has new type of water valve that assures uniform flow of water . . . powerful vacuum for efficient pickup (performs *quietly*) . . . a Finnell-developed trouble-free clutch . . . self-winding cable reel . . . improved waterproof wiring and minimum electrical connections, simplifying the cleaning of the machine . . . G. E. Motors and Timken Bearings. The machine is self-propelled—operator merely guides it. Supplied with or without powder dispenser. Incidentally, it's good to know that when you choose Finnell Equipment, a Finnell man is readily available to help train your maintenance operators in its proper use.

#### SEE IT IN ACTION ON YOUR OWN FLOORS!

Find out what you would save with a Finnell Scrubber-Vac. Finnell makes several models and sizes. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 2205 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

## FINNELL SYSTEM, INC.

*Pioneers and Specialists in*  
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES  
IN ALL  
PRINCIPAL  
CITIES



# Safety Leaders of 1950

## Winners in National Safety Council's Industrial Contests

**A** RECORD-BREAKING low frequency rate of 7.70 disabling injuries per million man-hours worked was reported for 1950 by 2,682 entrants in the 14 industrial groups in which contests were held.

The combined frequency rate for the winners of National Safety Council trophies was 0.77—one-tenth the average for all contestants.

Average rates for both the winners and for all contestants showed a reduction from 0.83 and 8.04 respectively. During the past two years the competing companies have reduced the frequency rate by 4 per cent.

The companies listed below are those which will receive first place trophies according to the rules of the contest in their own industry. In the Chemical, Petroleum, Printing and Publishing, Textile, Commercial Vehicle, and Transit contests, first-place trophies are awarded only to the unit operating the largest number of man-hours in case several have perfect records. In other contests, all companies or plants with perfect records receive duplicate first-place trophies.

In addition to the contests listed here, a competition is also conducted by the Metals Section on a fiscal year basis, July 1 to June 30.

Complete lists of all winners, plus second and third place winners and companies receiving certificates of merit for perfect records, appear in the contest bulletins which are being sent to all participating companies and plants. Each bulletin also contains a brief analysis of experience in the industry and a coded list permitting each non-winning company to identify its own record and compare it with others.

Following are the first-place trophy winners:

### AERONAUTICAL INDUSTRIES

North American Aviation, Inc., Downey, Calif.

### CHEMICAL

#### DIVISION I

##### Group A

E. I. du Pont de Nemours & Co., Martinsville Plant.

##### Group B

E. I. du Pont de Nemours & Co., Technical Laboratory.

##### Group C

E. I. du Pont de Nemours & Co., Philadelphia Grasselli Works.

#### DIVISION II

##### Group A

Owens-Illinois Glass Co., Gas City, Ind.

##### Group B

Monsanto Chemical Co., Nitro, W. Va.

##### Group C

Wyandotte Chemicals Corp., West Plant.

#### DIVISION III

##### Group A

American Cyanamid Co., Calco Chemicals Div., Willow Island, W. Va.

##### Group B

U. S. Industrial Chemicals Inc., New Orleans Plant.

##### Group C

Visking Limited, Lindsay, Ont.

### COMMERCIAL VEHICLE

Radio Cab Co., St. Cloud, Minn.

### FOOD

#### DIVISION I

##### Group A

Pillsbury Mills, Inc., Buffalo, N. Y.

##### Group B

Pillsbury Mills, Inc., Atchison, Kan.

Pillsbury Mills, Inc., Enid, Okla.

General Foods Corp., Gaines Division, Kankakee, Ill.

Carnation Company, Albers Milling Div., Seattle, Wash.

Robin Hood Flour Mills, Limited, Moose Jaw, Sask.

##### Group C

General Mills, Inc., Soybean Processing Plant, Belmond, Iowa.

General Mills, Inc., Flour & Feed Mill, Spokane, Wash.

General Mills, Inc., Flour & Feed Mill, Ogden, Utah.

General Mills, Inc., Flour Mill, Amarillo, Tex.

General Mills, Inc., Flour Mill, El Reno, Okla.

General Foods Corp., Corn Mill Division, Kankakee, Ill.

The Quaker Oats Co., Los Angeles, Calif.

General Mills, Inc., Flour & Feed Mill, Los Angeles, Calif.

Ralston Purina Co., Circleville Branch.

Inglehart Brothers, Division General Foods Corp., Clarksville, Tenn.

Cooperative Mills, Inc., Roanoke, Va.

International Milling Co., Greenville, Tex.

International Milling Co., New Prague, Minn.

International Milling Co., Blackwell, Okla.

Robin Hood Flour Mills, Limited, Calgary, Alberta.

Ralston Purina Co., Charlotte Branch.

Pillsbury Mills, Inc., Globe Mills Division, Astoria, Ore.

Ralston Purina Co., Los Angeles Branch.

Pillsbury Mills, Inc., Feed & Soy Division, Centerville, Ia.

Pillsbury Mills, Inc., Feed & Soy Division, Clinton Soy Plant.

General Mills, Inc., Flour Mill, Johnson City, Tenn.

Ralston Purina Co., Montreal Branch.

Carnation Company, Albers Milling Division, Hillsboro, Ore.

Inglehart Brothers, Division General Foods Corporation, Pendleton, Ore.

Carnation Co., Albers Milling Division, Peoria, Ill.

National Biscuit Co., Flour Mill, Carthage, Mo.

#### DIVISION II

##### Group A

National Biscuit Co., Philadelphia, Pa.

##### Group B

Kellogg Co., Omaha Plant.

National Biscuit Co., Newark, N. J.

National Biscuit Co., Pretzel Bakery, York, Pa.

National Biscuit Co., Portland, Me.

##### Group C

The Borden Co., Newport, N. Y.

General Foods, Ltd., Windsor, Ont.

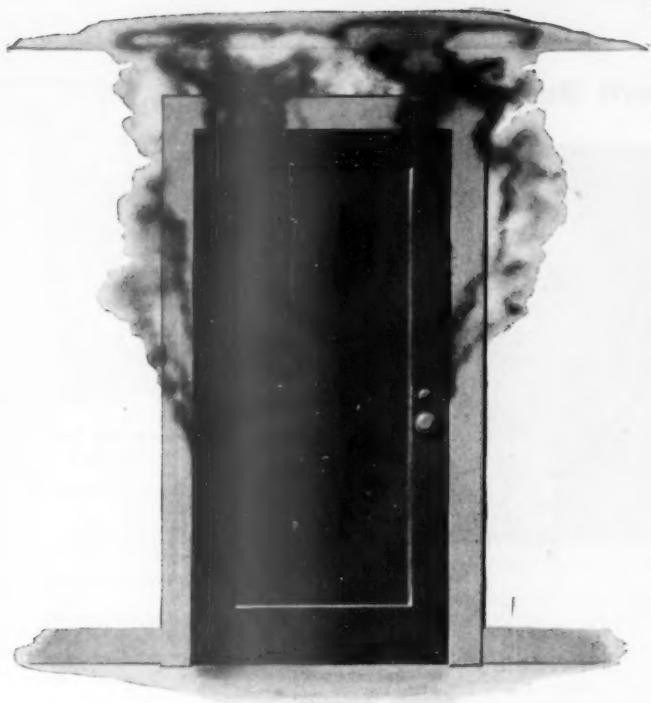
General Foods Corporation, Maxwell House Tea Division, Brooklyn.

I. J. Grass Noodle Co., Chicago.

General Mills, Inc., Purity Oats Mill, Keokuk, Ia.

General Foods Corp., Minute Tapioca Plant, Orange, Mass.

—To page 44



## *Where is the safest place to keep your documents?*

Are your contracts, blueprints, accounts receivable—the records that keep your business going—really safe?

If you've ever seen business papers charred by fire . . . or made illegible by water from fire fighting, you'll want to make sure it can't happen to your records.

Wherever you store these papers, you can rely on a *Kidde* Fire Extinguishing System to protect them. A Kidde System uses carbon dioxide—a gas that won't mark, stain or discolor papers—and it puts out fire *fast*.

You can put a Kidde system on guard over one or many record vaults . . . ready at the first sign of flame to release a fire-smothering cloud of CO<sub>2</sub> . . . and do it *automatically*.

Why not go *all the way* in protecting your papers. Call a Kidde expert for full information.

# **Kidde**

**Walter Kidde & Company, Inc., 545 Main Street, Belleville 9, N. J.**  
**Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.**

## Colonel Stilwell Retires

COLONEL JOHN STILWELL, vice-president of Consolidated Edison Company of New York, Inc., and a former president of the National Safety Council, retired April 1, after 42 years of service in the company and its predecessors.

Colonel Stilwell has earned distinction in public utility circles and in many other fields. He served the National Safety Council as president from 1939 to 1944. From 1937 to 1947 he was a member of the Council's Board of Directors and its chairman for two years. He has been a Trustee since 1942.

He has also served as president of the American Museum of Safety and the Greater New York Safety Council. He has been chairman of Consolidated Edison's Central Safety Committee since its organization in 1944.

In the years that followed his first job with Consolidated Gas Company, as draftsman in 1909, Colonel Stilwell was responsible for the introduction in that company of modern punch-card payroll systems, and the changeover from horse-drawn to motor transport. As Consolidated Edison vice-president, his jurisdiction included the Transportation, Payroll, Insurance, Real Estate and Resuscitation departments.

His interest in the welfare of utility workers led him to the presidency of the employees' mutual aid society and membership on the board of Edison Savings and Loan Association for eleven years. He was responsible in large part for the creation in 1927 of Green Mountain Lake Farms, Inc., a convalescent home for company people at Pawling, N. Y.

Colonel Stilwell was born in Yonkers and has always lived in that city. He attended public school in Yonkers and is a graduate of the Sheffield Scientific School at Yale University. He served with the 80th Division in the American Expeditionary Force, becoming assistant chief of staff, 4th Army Corps. He returned from



Col. John Stilwell

Germany, where he was assigned after the armistice, as lieutenant colonel.

Colonel Stilwell is a trustee of the Yonkers Savings Bank and the National Safety Council and is active in the Federal Grand Juror's Association. He sat on the Executive Board of Manhattan Council, Boy Scouts of America, in 1928 and later served two terms as Borough Scout Commissioner. For the past twenty years, he has been a member-at-large of Scouting's National Council.

### Safety Leaders

(From page 42)

National Biscuit Co., Cone Bakery, Dayton, Ohio.  
National Biscuit Co., Holland Rusk Bakery, Holland, Mich.  
General Mills, Inc., Purity Oats Mill, Minneapolis.  
The Quaker Oats Co., Depew, N. Y.  
The Quaker Oats Co., Tecumseh, Mich.  
Peter Paul, Inc., Philadelphia.  
National Biscuit Co., Cereal Plant, Battle Creek, Mich.  
Conlon Baking Co., Charleston, W. Va.

#### DIVISION III

Group A  
Dairymen's Association, Limited, Honolulu, T. H.  
Group B  
The Borden Co., Arcade, N. Y.

The Borden Co., Limited, Chateau Cheese Division, Ottawa, Ont.

#### Group C

Kraft Foods Co., Kendallville, Ind.  
Kraft Foods Co., Galena, Ill.  
Kraft Foods Co., Antigo, Wis.  
Kraft Foods Co., Stockton, Ill.  
The Borden Co., Cincinnati, N. Y.  
Southern Dairies, Inc., Chattanooga, Tenn.  
The Borden Co., Delevan, N. Y.  
Kraft Foods Co., Albany, Minn.  
Consolidated Dairy Products Co., Long Island City, N. Y.  
Kraft Foods Co., Watkins, Minn.  
The Borden Co., North East Division, Albany, N. Y.

#### DIVISION IV

Group A  
Diamond Crystal-Colonial Salt Div. General Foods Corp., St. Clair, Mich.

#### Group B

General Foods, Limited, Montreal Plant.  
Kraft Foods Co., Oakland, Calif.  
Libby, McNeill & Libby, Kokomo, Ind.  
Libby, McNeill & Libby, Houston, Del.  
California Packing Corp., Mountain States Division, Morgan Plant.  
Kraft Foods Co., Freeport, Ill.

#### DIVISION VI

Group A  
General Cigar Company, Inc., Philadelphia, Pa.

#### Group B

General Cigar Co., Inc., Benton, Ky.  
Bayuk Cigars, Inc., Lancaster Leaf Plant.  
Bayuk Cigars, Inc., Tenth Street Plant.

#### DIVISION VII

Group A  
National Distillers Products Corp., Louisville Div.

#### Group B

Frankfort Distilleries, Inc., Louisville, Ky.  
Joseph E. Seagram & Sons, Inc., Old Farmer's Distillery, Athertonville, Ky.  
Joseph E. Seagram & Sons, Inc., Hunter-Wilson Distilling Co., Owynbrook, Md.  
Schenley Distillers, Inc., Lebanon, Ky.  
Brown-Forman Distillers Corp., Early Times Div., Shively, Ky.  
Brown-Forman Distillers Corp., Labrot & Graham Div., Versailles, Ky.  
Schenley Distillers, Inc., Logansport, Pa.  
Schenley Distillers, Inc., Ekron, Ky.

#### DIVISION VIII

Group A  
Miller Brewing Co., Milwaukee, Wis.  
Group B  
National Breweries, Limited, Frontenac Breweries, Limited.

#### FLUID MILK DIVISION

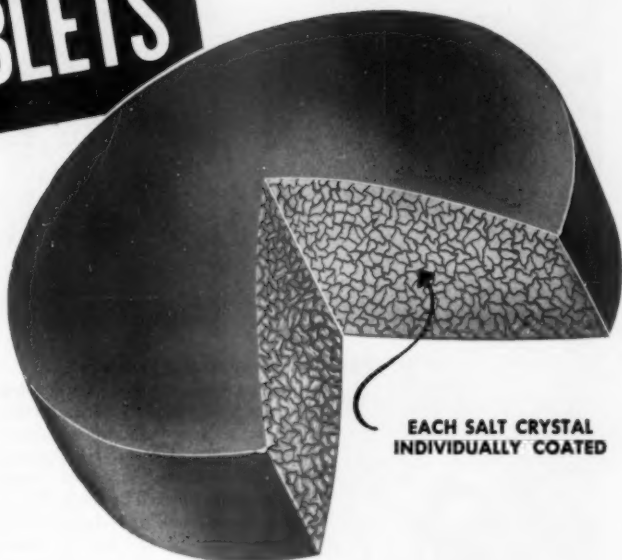
Group A  
Ewing-Von Allmen Dairy Co., Louisville, Ky.

—To page 46

# New! PEP-UP (IMPREGNATED) SALT TABLETS

WILL NOT CAUSE NAUSEA  
OR STOMACH DISTRESS

"PEP-UP" Impregnated Salt Tablets are subjected to an exclusive patented process which forms a complete coating around each crystal of salt in each tablet. This slow dissolving tablet eliminates nausea and digestive disorders usually experienced when taking fast dissolving plain salt tablets or salted drinking water. The controlled dissolving releases some salt immediately, which insures quick salt replacement, but still not in sufficient quantities to cause nausea.



EACH SALT CRYSTAL  
INDIVIDUALLY COATED

## RELEASES SALT IMMEDIATELY (Not Enteric Coated)

- \* Controlled (slow) dissolving eliminates nausea.
- \* Starts dissolving immediately.
- \* Dissolves completely in about 100 minutes.
- \* No delay in getting salt into system.
- \* Withstands high temperatures and rough handling.
- \* Can be stored for long periods without deteriorating.
- \* Will not absorb moisture from air and clog dispensers.
- \* The Formula used for producing Impregnated Salt Tablets was developed at the United States Naval Medical Research Institute. The tablets meet government specifications for Type III, Class C impregnated Salt tablets (specifications set forth in Federal Standard Stock Catalog No. SS-S-31C, Section IV (part 5), dated January 22, 1948). Write for literature and prices.

### EXPENDABLE DISPENSER

PEP-UP Impregnated Salt Tablets come to you in sanitary, factory-sealed Dispensers at no extra cost. THROW AWAY DISPENSER WHEN EMPTY. HANG UP A NEW ONE. Save the expense of purchasing, servicing and replacing individual dispensers.



In Canada—PARMEE, LTD.—Toronto

# UNITED STATES SAFETY SERVICE Co.

Kansas City 6, Missouri • Branches in Principal Industrial Cities

## Service Restored, Nobody Hurt



Eight inches of ice and snow, the result of one of the worst sleet and snow storms in the history of the city, failed to keep employees of the Nashville Electric Service of Nashville, Tenn., from restoring disrupted service to a vast number of their customers during the exigency.

The men worked 85,000 man-hours without a disabling injury from January 31, the day the storm struck the city, to February 10, the end of the emergency period.

This remarkable record was accomplished despite ice conditions which were so bad that some of the men had to purchase currycombs to place on the bottoms of their

boots to enable them to walk.

Linemen climbed ice-coated poles to do their jobs and company drivers had to maneuver their vehicles over treacherous, ice-covered streets, which were sometimes blocked by limbs, which had weakened and fallen from the weight of the ice, or trees, which had been blown over during the storm.

Each department of the company contributed to the establishment of this extraordinary safety record by functioning smoothly and efficiently throughout the emergency.

Accompanying photographs show some of the unfavorable conditions under which employees had to work.

### Safety Leaders

—From page 44

#### Group B

Borden's Farm Products Division of The Borden Co., Borden-Castanea Inc. Group C

The Central Dairy Products Co., Oklahoma City, Okla.

Sheffield Farms Co., Inc., Norwich District.

Sheffield Farms Co., Inc., Hobart District.

Sheffield Farms Co., Inc., Cortland District.

Borden's Ice Cream Co., Division of The Borden Company, Dothan, Ala.

Borden's Dairy, Division of The Borden Company, Daytona Beach, Fla.

Moore Dairy, Lancaster, Pa.

The Borden Co., Mansfield, Ohio.

The Borden Co., Michigan Milk Division, Owosso Branch.

The Borden Co., Youngstown, Ohio.

Borden's Farm Products Division of The Borden Co., Washingtonville.

Southern Dairies, Inc., Wilson, N. C.

Sheffield Farms Co., Inc., Harlem Valley District.

Sheffield Farms Co., Inc., Northern Penna. District.

The Borden Co., Middletown, Ohio.

Borden's Farm Products Div., The Borden Co., Sussex Milk & Cream Co.

### MARINE

#### SHIPBUILDING AND REPAIR DIVISION-PRIVATE

##### Group A

Electric Boat Co., Groton, Conn.

##### Group B

Erie Railroad Co., Jersey City, N. J.

United States Steel Company, Marine

Ways, Clairton, Pa.

Dravo Corp., Wilmington Plant.

Ashland Oil & Refining Co., Ashland,

Ky.

#### SHIPBUILDING AND REPAIR DIVISION-GOVERNMENT

##### Group A

Pearl Harbor Naval Shipyard, Pearl Harbor, T. H.

##### Group B

Corps of Engineers, South Atlantic Div.

#### STEVEDORING DIVISION

The Erie Dock Co., Erie, Pa.

#### HARBOR EQUIPMENT DIVISION

##### Group A

Erie Railroad Co., Jersey City, N. J.

##### Group B

The Atlantic Refining Co., Philadelphia, Pa.

Corps of Engineers, Southwestern Div.

#### TANKERS DIVISION

Standard Oil Co. (Indiana), Marine

Department.

#### CARGO AND PASSENGER VESSELS DIVISION

The Interlake Steamship Co., Cleveland, Ohio.

### MEAT PACKING

#### DIVISION I

##### Group A

Wilson & Co., Inc., Oklahoma City.

##### Group B

Swift & Co., Los Angeles.

##### Group C

Swift & Co., Scottsbluff, Neb.

Swift & Co., Ocala, Fla.

Swift & Co., Hallstead, Pa.

#### DIVISION II

Peter Eckrich & Sons, Inc., Kalamazoo, Mich.

### PULP AND PAPER

#### DIVISION I

##### Group A

Wood Conversion Co., Cloquet, Minn.

##### Group B

Crown Zellerbach Corp., Port Townsend, Wash.

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AN ANNOUNCEMENT OF IMPORTANCE TO AMERICAN INDUSTRY

*NOW* the name

**PENOPTIC**

*will identify superior quality*  
:  
**INDUSTRIAL LENSES**

For more than a quarter of a century you have known these fine lenses by other names. They are the products of Pennsylvania Optical Company, one of America's leading makers of ophthalmic and industrial lenses, acknowledged to be among the finest available. You just cannot buy better lenses at any price.

**NOW AVAILABLE**

Direct from the manufacturer at substantial saving. The Penoptic line includes a complete range of welding, cover and safety lenses. Write or telephone your order to

**PENNSYLVANIA OPTICAL COMPANY**

ROASTING, PA.

\*Penoptic is the registered trademark of Pennsylvania Optical Company.

**KNOWN FOR FINE OPHTHALMIC PRODUCTS SINCE 1886**



# Green Cross News . . .

## Activities of Local Safety Councils and Chapters

Compiled by **TOM A. BURKE**

Director of Local Safety Programs, Field Organization, NSC

### Green Cross Campaigns

Preliminary planning and work on the annual Green Cross financial campaigns has been underway for some time in San Francisco, Oakland, Cleveland, Omaha, Kansas City, Springfield and Worcester (Mass.), and St. Joseph (Mo.), where drives are scheduled for spring or early summer. The St. Joseph Safety Council has announced the week of May 13-19 as "Green Cross Week" in that area. The campaign organization was set up in late March and advance solicitations were made during April. A big safety parade will feature the "Green Cross Week" observance. Gilbert Burnham, member of a prominent insurance firm and vice-chairman of the safety council, is general chairman for the St. Joseph drive. The goal is \$15,000.

### Carl Smith Honored

While the meeting was heralded as the "33rd Annual Banquet and Meeting" of the Greater Cleveland Safety Council, it was really Carl Smith all the way. The affair marked the completion of 25 years of service by Mr. Smith as manager of the Greater Cleveland Safety Council. He found himself on the receiving end of warm congratulatory words of praise from official spokesmen at the dinner. Ned H. Dearborn, president of NSC, emphasized Carl's long record of successful accomplishment in the cause of safety. A beautiful testimonial book from his many friends throughout the country was a pleasant surprise to the honored guest of the evening. The affair was held at the Hotel Carter on March 8. Judge Lee E. Skeel,

president of the Cleveland Council for many years, presided. It was one of the few times in Carl's long and successful career that he was persuaded to appear at the head table at one of his Council meetings.

### Heads Board of Governors

Roy M. Godwin, manager of the safety department of the Philadelphia Electric Company System, has been appointed chairman of the Board of Governors of the Philadelphia Safety Council, a division of the Chamber of Commerce. Godwin is prominent in the field of industrial safety, locally and nationally. He has been an active member of the executive committee and Board of the Philadelphia Council for several years and has served on important NSC committees. Under the system of rotating chairmen, he succeeds L. B. Raycroft, who has headed the Council the past two years.

### Growth of a Network

Fifty-two NBC stations originally signed up for the "Green Cross Song Festival" series of 13 weekly radio programs. After the initial concert, given at Denver on February 24, by the East High School a cappella choir, 18 additional stations requested the series. On March 17 when the program was presented in Tampa, Fla., by the Hillsborough High School Choir, 94 stations carried the program. An interesting feature of the Tampa broadcast was the appearance of "Babe" Zaharias, foremost woman golfer and perhaps the greatest woman athlete of modern times. Her sincere appeal to teen-agers for sportsmanship in driving carried conviction. Chapters and Councils in Denver, Pittsburgh, Milwaukee, Tampa, Portland, Kansas City, Rochester, Fort Wayne, Des Moines, Salt Lake City, Seattle, Baltimore and Oakland, cooperated with the Na-



**HONORED** at dinner celebrating his 25 years as manager of Greater Cleveland Safety Council is Carl L. Smith (center). At desk is Ned H. Dearborn, NSC president. Seated: Hal Lehrman, New York, speaker of evening.



## HELPING TO KEEP AMERICA STRONG

**America's destiny rides on her ability to produce. Day and night, the telephone helps our factories get out the goods and the guns. In many other ways it helps to safeguard the country and its people.**

**Civilian Defense.** The telephone is an essential link in national, state and local defense. One of the Bell System's most important current undertakings is the installation of telephone facilities for a Radar Network rimming the country.

**Meeting Military Needs.** Thousands of miles of private line networks have already been provided for military needs. Long Distance as well as local telephone facilities

are also being built and installed in record time for military bases and training camps all over the country.

**Arms and Radar Leader.** The Nation's largest producer of gun directors, radar equipment, radio and telephones for military use during the last war was the Western Electric Company, manufacturing and supply unit of the Bell System. Western Electric and Bell Labora-

tories completed over 1200 military projects. They are again working on special defense assignments.

**Value of Growth.** Times of national emergency emphasize the value of a nationwide telephone system big enough and good enough to meet the needs of its people, its armed forces, and its industries.

Whatever the job, you can depend on the telephone and on telephone people to help get it done.

**BELL TELEPHONE SYSTEM**



# Your choice of COLOR



## IN HARD BOILED\*

Safety Hats

**STRONGER-THAN-STEEL  
FIBERGLAS**

crowns offer unlimited choice of vivid, permanent colors... with color molded all the way thru the safest crowns ever built. Shock-resisting ribbed design also available in aircraft grade aluminum.

Write for  
Full Color Circular

**SAVE MONEY**

One size fits all heads... save time! reduces inventories. Fully adjustable headband and hammock; can be changed in six seconds. Self-shaping and air-cushioned for comfort.

EVERYTHING  
**BULLARD**  
IN SAFETY  
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**HARD  
BOILED**

Distributors in  
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**E. D. BULLARD COMPANY**  
275 EIGHTH STREET, SAN FRANCISCO, CALIFORNIA

tional Safety Council in sponsoring the program. Oakland closes the series on May 19 when the Eastbay Chapter will present the Richmond Union High School Choir.

### Industrial Accomplishment

In an attractive brochure published recently by the Louisville Safety Council as its annual report, charts show real progress in industrial safety. In 1948, 33 persons were killed in occupational accidents; in 1949 there were 29 occupational deaths, while last year the fatalities were reduced to 13. The big decrease last year was made without any appreciable shrinkage in production in the Louisville area. Injuries dropped proportionately and the economic cost of the occupational accidents shows an estimated saving of \$2,624,000 last year compared with 1949. A strong, active industrial division in a community safety council will pay real dividends in lives saved and in cold hard cash.

### A Piece of String

The Oklahoma State Safety Council recently sent out a real eye-catcher to promote attendance at the Annual State Safety Conference in Tulsa, April 18-20. A piece of green cord about six inches in length was stapled to the top of a two-color, single-page announcement, headed in bold red letters, "Here's the *String*—you have the *Finger!*" Then followed a brief appeal from President Clyde Reeves urging attendance and calling attention to the enclosed preliminary program. A pertinent postscript read: "If you do not have a finger, just circle your calendar. You can still see and if you attend the Oklahoma Conference you'll probably find out how to save those eyes of yours."

### "Accident Prevention News"

The Western Pennsylvania Safety Council is publishing a monthly house organ of tabloid newspaper size with bold headlines, plenty of illustrations, a good editorial page and a lot of interesting stories of safety effort and accomplishment written from a news slant. This well-edited publication

will replace the council's two Newsletters that have been published for several years. The first issue of *Accident Prevention News* sets a high standard. F. Rhodes Henderer, director of public information for the Council, is the editor of this attractive, newsy publication.

### "Vacation Daze"

It will soon be time to find a place in plant safety programs for emphasis on vacation hazards. The Greater Minneapolis Safety Council held its first vacation safety meeting on April 9, a women's gathering that was well attended. The general subject was "How to Live Through a Vacation." Honorable Levi M. Hall, chairman of the board of the Minneapolis Council, presided. Talks were made by prominent officials and other citizens qualified to discuss particular phases of the subject. The program designers got away from the common subjects usually listed on safety programs. For example: "Well Spent—You or Your Vacation"; "How to Leave Home"; "Don't Kill Him—We Want Him Back"; "Boat Notes and Dip Tips"; "Al Fresco Fiasco"; the latter no doubt covering the dangers of sunburn. Mrs. Thomas Sands was general chairman of the conference sponsored by the Council's Women's division.

### Fire Prevention Awards

St. Louis has won first place for Missouri in the National Fire Prevention contest for 1950. The Safety Council of Greater St. Louis has directed intensive fire prevention programs in that city for many years in cooperation with the fire department and other interested groups. Much credit is due the St. Louis Safety Council in winning the award. St. Joseph, Mo., which won first place in 1946, 1947, and 1948, won second honors for 1950 among Missouri cities.

### Walter C. Titus Dies

Walter C. Titus, retired mill safety director, who for many years was prominent in the work of the Western Pennsylvania Safety Council, died recently.  
—To page 53



# Bright Eyes *Stay* Bright...

when **eye**  
**SAVERS** stand guard!

Workers like the exclusive features of Watchmocket's TUC-AWAY goggle. Welded Retrax "telescoping" temples and change-around lens plan give comfortable fit and *sure* eye protection. Get complete details from your safety supplier or write direct.

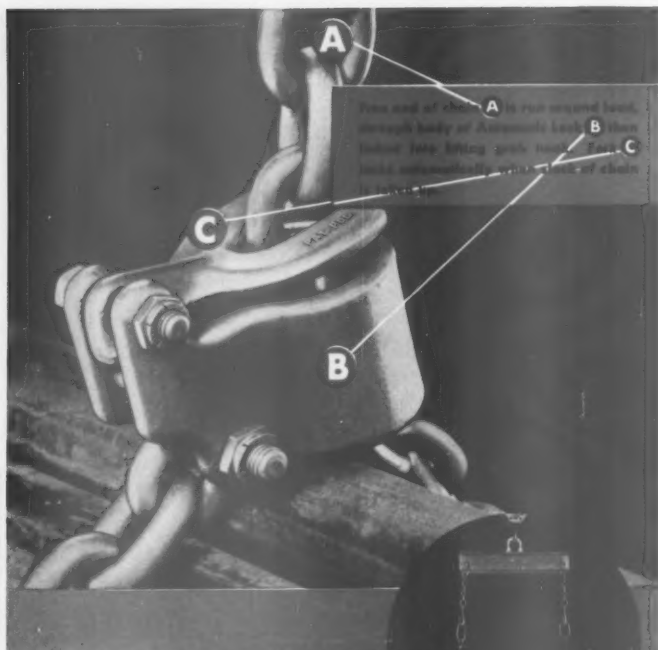
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Write today for Bulletin DH-266 on the ACCO Bundling Chain with drop-forged Automatic Lock (Patent Pending).

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In Business for Your Safety

## COMING EVENTS

*In the Field of Safety*

### May 9, Bethlehem, Pa.

Twenty-fourth Annual Eastern Pennsylvania Safety Conference. Harry C. Woods, executive secretary, Lehigh Valley Safety Council, 602 East Third St., Bethlehem, Pa.

### May 10-11, Baltimore, Md.

Maryland Statewide Safety-Health Conference and Exhibits. (Lord Baltimore Hotel). Joseph A. Haller, director of safety, State Industrial Accident Commission, Equitable Bldg., Baltimore 2, Md.

### May 14-16, Syracuse, N. Y.

Central New York Safety Conference and Exposition. (Hotel Syracuse). Walter L. Fox, executive secretary, Safety Division, Syracuse Chamber of Commerce, 351 S. Warren St., Syracuse, N. Y.

### May 16-18, Winston-Salem, N.C.

Twenty-first Annual North Carolina Statewide Industrial Safety Conference. (Robert E. Lee Hotel). H. S. Baucum, safety director, North Carolina Industrial Commission, Raleigh, N. C.

### May 17-18, Duluth, Minn.

Twenty-seventh Annual Conference Lake Superior Mines Safety Council. (Hotel Duluth). John A. Johnson, chief, Accident Prevention and Health Division, Region V, U. S. Bureau of Mines, 18 Federal Bldg., Duluth 2, Minn.

### May 22-24, Grand Rapids, Mich.

Annual Michigan Safety Conference. (Civic Auditorium). Vernon W. Hale, executive secretary, Michigan Safety Conference, 302 Association of Commerce Bldg., Grand Rapids 2, Mich.

### May 24-26, Norfolk, Va.

Seventeenth Annual Virginia Statewide Safety Conference. William M. Meyers, executive secretary, Richmond Safety Council, Allison Bldg., Richmond 19, Va.

### May 31-June 2, Portland, Ore.

Seventeenth Annual Western Forest Products Safety Conference. (Multnomah Hotel). Miles Murray, secretary, c/o Crown Zellerbach Corp., Public Service Bldg., Portland 4, Ore.

### June 4-7, Chicago

Twenty-eighth Annual Midwest Safety Conference. (Congress Hotel). Joseph F. Stech, manager, Greater Chicago Safety Council, 10 N. Clark St., Chicago 2.

### June 21-23, Salt Lake City

Thirteenth Annual Western States Safety Conference. Clarence Williams,

executive director, Utah Safety Council, State Capitol Bldg., Salt Lake City, Utah.

#### Sept. 6-7, York Harbor, Me.

Twenty-fourth Annual Maine Safety Conference. Arthur F. Minchin, director, Industrial Safety Division, Department of Labor and Industry, Augusta, Me.

#### Oct. 8-12, Chicago

Thirty-ninth National Safety Congress and Exposition. (Stevens Hotel). R. L. Forney, general secretary, National Safety Council, 425 N. Michigan Ave., Chicago 11.

### Green Cross News

(From page 50)

ty Council and assisted in its original organization, died in his home in Tarentum, Pa., on February 28. For many years he was safety director of Allegheny Ludlum Steel Corporation, and was a life member of the Western Pennsylvania Safety Council. Because of his interest and leadership in civic affairs over a long period he was widely known as "Mr. Tarentum." He was 77 years of age.

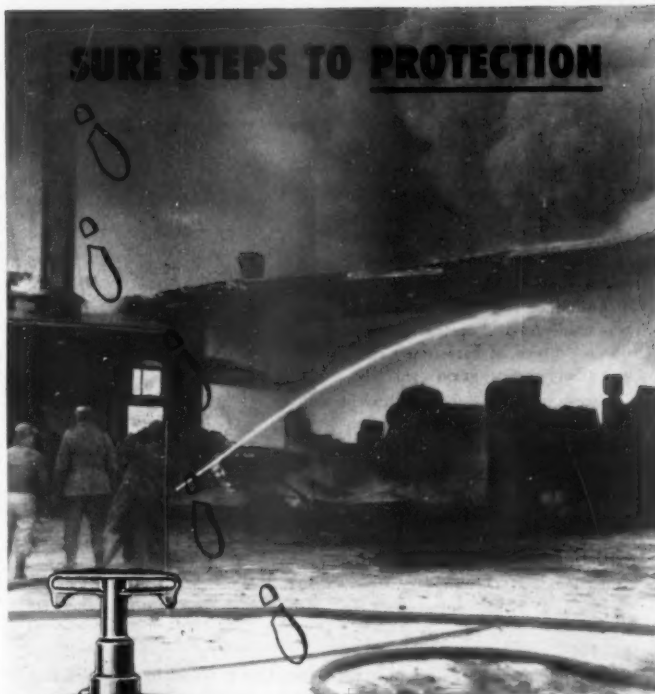
#### Alloy Steel Exchange

Western Pennsylvania Safety Council has announced the organization of the "Alloy Steel Exchange" as one of its industrial sectional activities. Its purpose is to bring together the alloy steel members of the safety council to exchange pertinent information and discuss mutual safety problems. Earl S. Stephen, safety consultant of the Council, is secretary of the group, which includes Allegheny Ludlum, Braeburn-Alloy, Crucible Steel, Firth Sterling and Universal Cyclics.

#### Bridgeport Institute

A Foremen's Institute section of the Bridgeport Safety Council (Conn.) is being organized, and a series of supervisory safety meetings is planned under the direction of Thomas Webb, former president of the Bridgeport Safety Council. The project should be well received by Bridgeport's extensive industrial interests.

Political leader: One whose task it is to keep ahead of several crowds, each going in a different direction.



Sparks from a metal grinder ignited an open container of paint remover causing this \$2,000,000 fire at Ohio National, Inc., Upper Sandusky, Ohio, Jan. 30, 1951.



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## Firestone Wins Fifth DSS Award

In recognition of its outstanding safety record during 1950, The Firestone Tire & Rubber Company was presented with the National Safety Council's Award of Honor for Distinguished Service to Safety today for the fifth time in six years.

Announcement of the award was made April 2 on the simulcast of the "Voice of Firestone" radio and television program over NBC.

Firestone is the only company in the rubber industry that has received the Award of Honor as many as five times.

J. E. Trainer, vice-president in charge of production for Firestone, received the award from Ned H. Dearborn, president of the National Safety Council.

Firestone has received the award for safety records achieved in 1945, 1946, 1947, 1948 and 1950. The award was based upon the records of the 28 Firestone plants in 11 states, in Canada and six other foreign countries which have 40,000 employees.

The Firestone plants' frequency rate for accidents during the calendar year of 1950 was reduced by 25 per cent and their severity rate was reduced by 30 per cent from the year 1949.

Each of ten Firestone plants accumulated more than 1,000,000 consecutive hours of work without accidents. Two plants worked more than 3,000,000 man-hours during the year without a disabling injury. These records were established by Akron, Ohio, Plant 1 with 3,236,965 hours, and the Pottstown, Pa., plant with 3,008,944 hours.

The 28 Firestone plants sharing in the National Safety Council Award of Honor are the six located in Akron, Ohio; two in Memphis; two in Los Angeles; two in Pottstown, Pa.; and those in Gastonia, N. C.; Bennettsville, S. C.; Fall River, Mass.; New Castle, Ind.; Des Moines, Iowa; Noblesville, Ind.; Wyandotte, Mich.; Lake Charles, La.; Hamil-



J. E. TRAINER, left, Firestone vice-president receives company's fifth DSS Award from Ned H. Dearborn.

ton, Ont.; Woodstock, Ont.; Sao Paulo, Brazil; Christchurch, New Zealand; Brentford, England; Port Elizabeth, South Africa; Buenos Aires, Argentina, and Bombay, India.

In presenting the award, Mr. Dearborn said: "During the year 1950, in Firestone factories throughout the entire world, your company set a record of only 2.1 disabling injuries per million man-hours of work."

In accepting this award, Mr. Trainer said: "I accept this National Safety Council Award on behalf of the more than forty thousand men and women of Firestone whose wholehearted cooperation with our safety program has made it possible for us to establish such an enviable safety record in our factories throughout the world. Our safety program is designed to make all of our people conscious of safety, not only in our plants, but also in their homes and on the streets and highways. We believe that this is vitally important, because statistics indicate that accidents in homes occur with far greater frequency than in our Firestone factories."

## Foundry Society Plans Technical Center

The American Foundrymen's Society, international technical society of the metal castings industry, has announced through its president, Walton L. Woody of National Malleable and Steel Castings Company, Cleveland, a program to found a technical center for the producers of cast metals vital to the nation's rearmament program. Over \$95,000 of a \$100,000 goal has been raised by voluntary subscription from the Society's 9500 members, and the center is to be established during the next two years in one of the principal Midwestern foundry centers.

Headquarters for the Society, since 1896 the technical society for the metal castings industry, have been located in Chicago since 1916. Selection of a site for a permanent headquarters and technical center will be made by a special housing committee of foundry executives.

## Offer M. S. Degree in Safety Engineering

Illinois Institute of Technology will offer a new educational program leading to a master of science degree in safety engineering, beginning next September, according to an announcement by John J. Ahern, director of the department of fire protection and safety engineering. The new graduate program is open to all persons with undergraduate degrees in engineering.

Those who have obtained bachelor's degrees in fire protection and safety engineering at Illinois Tech ordinarily will be required to spend two semesters for the master's degree. Other engineering graduates probably will have to spend three semesters.

For more than 35 years Illinois Tech (until 1940 Armour Institute of Technology) has had the only degree-granting fire protection engineering department in the nation. Safety engineering was added in 1945.



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The 2% aqueous solution is not irritating or toxic in wounds; minor injuries are reported more promptly when 'Mercurochrome' is the routine antiseptic, because treatment is not painful.

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## THE HONOR ROLL

Records of operation exceeding 500,000 man-hours, or one year, if exposure exceeds 250,000 man-hours, without a disabling (lost-time) injury are invited.

### Combustion Engineering-Superheater, Inc.

Chattanooga, Tenn., Power Boiler Plant No. 1—1,305,849 man-hours, terminating January 31, 1951.

Chattanooga, Tenn., Sheet Metal Shop Plant No. 2—758,147 man-hours, as of March 1, 1951; continuing.

### Hungerford Packing Co., Inc.

Hungerford, Pa.—October 20, 1949 to March 25, 1951; 322,987 man-hours; continuing.

### General Foods Corp.

Maxwell House Plant, Brooklyn, N. Y.—5½ years; 1,000,000 man-hours; continuing.

### General Motors Corp.

Inland Manufacturing Division, Dayton, Ohio—September 12, 1950 to February 20, 1951; 3,555,646 man-hours.

### General Petroleum Corp.

Natural Gasoline Department, Los Angeles, Calif.—1,597,936 man-hours as of December 31, 1950; continuing.

### Johns-Manville Corp.

Asbestos Factory, Canadian Johns-Manville Co., Ltd., Asbestos, Quebec—March 11, 1950 to March 8, 1951; 1,000,000 man-hours; continuing.

Asbestos Mine Division Mill, Asbestos, Quebec — March 24, 1950 to March 10, 1951; 1,145,935 man-hours; continuing.

### New Orleans Public Service Inc.

Entire company—November 28, 1950 to February 6, 1951; 1,371,826 man-hours.

Auditing Department—February 11, 1946 to March 1, 1951; 2,278,212 man-hours; continuing.

Railway Department—October 1, 1950 to February 6, 1951; 1,298,535 man-hours.

Engineering Department—October 1, 1941 to March 1, 1951; 1,120,233 man-hours; continuing.

Transportation Division—October 1, 1950 to February 6, 1951; 1,017,398 man-hours.

### Republic Steel Corp.

Miscellaneous Departments, Youngstown District—1,387 days; 5,000,159 man-hours as of February 28, 1951; continuing.

### United States Steel Co.

Gary Steel Works—February 18, 1951 to March 5, 1951; 2,205,189 man-hours.

West Mills Division, Gary Steel Works—November 24, 1950 to March 12, 1951; 2,670,130 man-hours.

Duquesne Works—January 16, 1951 to February 13, 1951; 1,160,000 man-hours.

Gary Sheet and Tin Mill—February 15, 1951 to March 18, 1951; 1,200,000 man-hours.

### Universal Atlas Cement Co.

Buffington, Ind.—October 16, 1950 to March 21, 1951; 971,172 man-hours.

## Isotope Uses Discussed At Conference

How much interest does industry have today in applications for radioactive materials?

Many of the 100 registrants for a conference on "Radioisotopes in Industry" at Cleveland's Case Institute of Technology during the week of April 2 were seeking their own specific answers, although the broad cross-section of industry represented was in itself a rather obvious answer.

The study sessions at Case, co-sponsored with the U. S. Atomic Energy Commission, provided registrants with a fund of special information and appreciation of the conditions which generally define the current status of industry's over-all interest in utilizing radioactivity:

1. Practical applications in industry are still largely potential, but few large-scale industrial processes are now without at least pioneering interest and some sign of successful problem-solutions.

2. Supply of radioactive materials—mostly readily available isotopes from AEC nuclear reactors, and fission materials left over from plutonium processing, now being considered for the first time as possible industrial tools—exceeds any demand foreseeable in industry today.

3. Fuller utilization of radioactive materials in industrial operations must be preceded by greatly intensified personnel training.



Commissioner T. Keith Glenan, Case Institute president on leave of absence, observed that the techniques for using radioisotopes are being increasingly better understood.

"This is encouraging," he noted, "because the most important single limiting factor in the utilization of isotopes has been the relatively small number of people who know how to use them safely and effectively. Today the supply of isotopes far outruns the demand of people who are skilled in their use. If isotopes are ever to take their place in the main stream of the U. S. and world economy, far greater numbers of skilled isotope technicians will be required."

Maximum potentialities of isotopes are far from realized, Glenan concluded, and he recommended an intensive study by industry of all the possible uses for isotopes—in process control, production, testing and research.

Paul C. Aebersold, chief of the AEC isotopes division, suggested these steps to acquire needed training for safe and efficient isotope handling: attend educational conferences like the Case program, visit the laboratories of active isotope users, enroll for the special training courses offered by the AEC isotope division at Oak Ridge. But before considering any broad-scale application of radioisotopes, he advised, industrial organizations should have in mind a sizable economic gain through a definite addition to their existing techniques of operation.

G. D. Calkins, of the Battelle Memorial Institute, pointed out that, because of extreme precautions taken in radiochemical laboratories, safer working conditions exist in them than in any comparable operations in industry today. He encouraged industry to start work in the radiochemical field with a small nucleus of personnel, expanding it with on-the-job training.

Conference participants were urged to cooperate in the technoeconomic study on "Industrial Utilization of Fission Products" being conducted for the Atomic Energy Commission by the Stanford (California) Research Institute.

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### ACTUALLY COSTS NOTHING

Blaw-Knox can arrange to have your insurance savings as they accrue apply to the cost of a Blaw-Knox Sprinkler System—providing you with the utmost in fire protection plus a good financial investment.

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uisher Systems.



"LITTLE  
JOEY  
SPRINKLER"



## Me and My Halo

(From page 25)

instruct all their workers both in safe practices and in their right to refuse to use defective equipment. Mike was given an amended set of instructions, including the right to get my judgment on doubtful tools, and to order new tools or parts when needed. And I was instructed to have my boys make a point of including hand tool operations in their inspection reports.

I felt, before that conference was over, like breaking down and taking the blame on my own shoulders. But to do that meant to put part of the blame on my assistants. So I stayed in the character of the all-wise, alert, on-his-toes staff man who keeps his boss out of trouble by endless vigilance and great astuteness.

So, by the time I got home tonight, I was in a mood to relax and be myself—not an actor playing many roles for the sake of getting a job done. Then, after supper, Sue asked me what was new at the plant and I—

— I'm ashamed to admit it, but my instinctive desire for being honest didn't prevent me from launching upon a highly colored, very selective version of the story, designed to show Sue that her husband is a combination genius and plaster saint.

Lord, but I'd be a wonderful guy if I was half as good as I have pretended to be in every one of my dealings with people today!

## ASKED and ANSWERED

Assistance with problems of accident prevention and industrial health is offered by National Safety Council. All inquiries are answered by mail and a few topics are selected for publication.

### Germ Killing Radiation

**Question:** We are interested in the installation of germ killing lights in an office building, principally for the prevention of colds. Is there any information available

concerning the general use and effectiveness of such lights? Would you recommend their installation?

**Answer:** The Naval Medical Department made a four-year study of heavy ultraviolet radiation of a recruit barracks. This study showed a small and rather questionable reduction in incidence of colds in the treated barracks, as compared to the untreated barracks.

A report of the British Medical Research Council tells of a rather extensive trial of ultraviolet radiation in an office building. This work could demonstrate no reduction in the incidence of upper respiratory infections.

There have been some favorable results in the irradiation of school rooms for primary grade school children. The fundamental difference seems to be that the school children are irradiated at all times when they are in a crowd and office workers are not.

At the present time, general installation of ultraviolet lamps for this purpose is of uncertain value. The results, if they are installed, are apt to be disappointing.

#### Combustible Gas Indicators

**Question:** Is there a gauge on the market which is designed for lowering into empty tank cars, which have previously contained oils or inflammable liquids, to determine whether or not it is safe, so far as gas is concerned, for a person to enter the car or light a torch in it? If so, can you make any suggestions as to its use?

**Answer:** Yes, there is such a gauge on the market.

The atmosphere in the tank car should be tested with a combustible gas indicator after the tank has been steamed and has been allowed to cool.

If the vapor content in the air is more than .1 per cent (one part in one thousandth) it is suggested that no man enter the tank without an approved fresh air hose mask. If, at this point, the tank is found to have an accumulation of scale and sludge, it should be removed and the car should be steamed for one to three hours more. After that, the atmosphere should be tested again with the combustible gas indicator.

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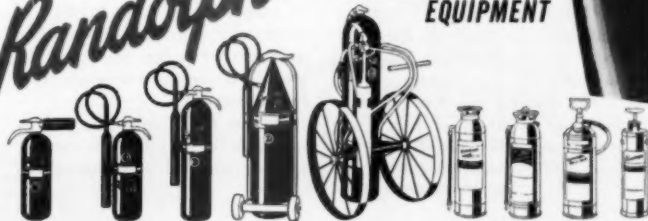
Non-damaging Randolph CO<sub>2</sub> evaporates without a trace, is non-toxic, won't conduct electricity, deteriorate or freeze. And all Randolph Models are Underwriters' Approved.

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# The Safety Library

Books, Pamphlets and Periodicals of Interest to Safety Men

## BOOKS AND PAMPHLETS

### Industrial Feeding

*Employee Feeding.* By John W. Stokes. Published by Edmund S. Whitten, Inc., Boston 16, Mass. January 1, 1951; 92 pages; no price given.

This manual, 8½" x 11", was written by John W. Stokes of the Stokes Management Consultant firm in Boston, Massachusetts. Mr. Stokes is lecturer on restaurant management, the Evening College of Commerce of Boston University, past president of the Massachusetts Restaurant Association, and special consultant on institutions.

This book is a sound and compact summary of considerable interest to the plant executive responsible for in-plant feeding. It covers matters of policy, organization, layout and equipment, purchasing, receiving and storage, food preparation and cooking, sanitation, costs, care of equipment and preventive maintenance.

Because of its summary nature, the book would be of particular interest to companies undertaking to install plant cafeterias or feeding systems, or who intend to expand what they are already doing.

The author does not deal with the subject of accident prevention except to call attention to the unusually high proportion of injuries incurred by kitchen and dining room help.

### Eye Conservation

*Eyes In Industry.* By Dorothy Adams Campbell, W. J. B. Riddell and Sir Arthur Salusbury MacNalty. Published by Longmans, Green and Co., Inc., 55 Fifth Avenue, New York, N.Y.: 1951. 234 pages; Price \$6.50.

This book, published in England, surveys many of the problems of industrial eye care and protection in that country.

The opening chapters on structure and functions of the eye are easily comprehensible by the layman and are enhanced by excel-

lent illustrations, many in color. It is an excellent text for anyone who wants to study the functions of the eye with relation to industry.

The portions of the book dealing with visual requirements in industry indicate that much greater progress has been made in this country than in England. The types of eye protection suggested for various operations are touched on rather lightly, and, apparently, the authors did not believe it of importance to include various types of eye protection that are available, as they are not used in that country.

This book should not be confused with *Eyes and Industry* by Dr. Hedwig S. Kuhn, published in 1950.

### Rotary Drilling

*Rotary Drilling Handbook on Accident Prevention and Safe Operation Practices.* American Association of Oilwell Drilling Contractors, 321 Reserve Loan Life Building, 505 North Ervay, Dallas, Texas; Second Edition Revised; 1950; 196 pages; Price \$2.00 to members, \$3.00 to non-members.

This handbook on safety in rotary drilling was prepared by the American Association of Oilwell Drilling Contractors under the supervision of a safety committee representing member companies of that association.

The book covers recommendations of safety leaders in the drilling industry as established over a long period of years. It is meant to augment present safe operating practices now adopted by individual drilling organizations, but not to supplant them. No attempt is made to establish standards, but an honest effort has been made to compile the best practices available in the industry.

To the uninitiated, suggestions are made for the establishment of a safety program in a drilling organ-

ization, both as to the responsibility for such a program at the various levels, and how the program should be administered.

General safe practices cover equipment, conduct on the rig, and rigging operations. Chemical, fire, and other special hazards are brought up to date in the new sections of the booklet. Motor vehicle operations, as they apply to the special heavy equipment used in drilling, are given careful attention.

The book can be used by anyone wanting to check the hazards in this industry, as a special chapter is included on definitions of terms used by the trade.

### Building Codes

*National Fire Codes, Building Construction and Equipment, Vol. III.* Published by National Fire Protection Association, 60 Battery-march Street, Boston 10, Mass. 1951. 717 p. Price \$4.00.

### Fire Prevention

*Illinois Rules and Regulations for Fire Prevention and Safety.* By Illinois Department of Public Safety, Springfield, Ill. 1951. 59 p.

### Job Description

*Industrial Relations Positions and Personnel.* By Philip H. Kriedt and C. Harold Stone. Available from Industrial Relations Center, University of Minnesota, Minneapolis, Minn. 1950. 72 p.

### Labor

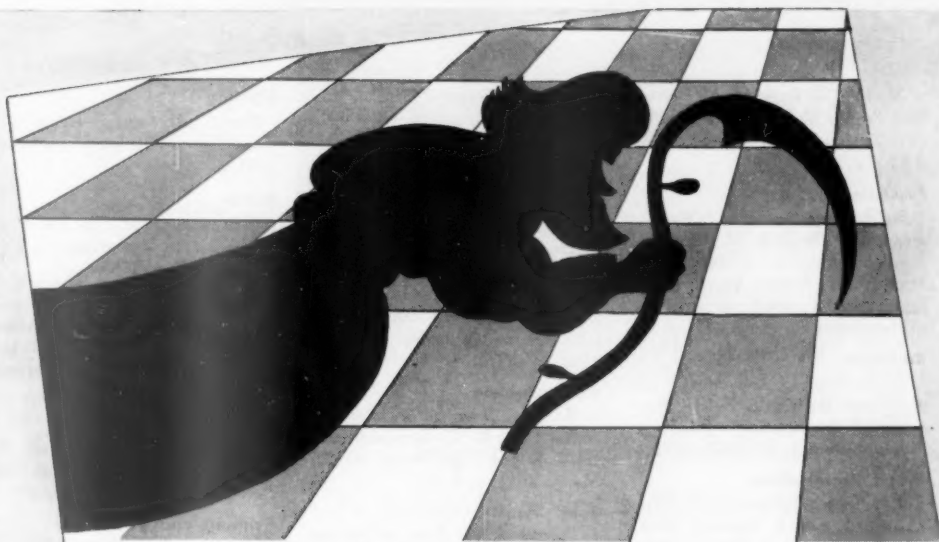
*Resumé of the Proceedings of the Seventeenth National Conference on Labor Legislation.* Available from Bureau of Labor Standards, Washington 25, D. C. 1950. 59 p. Free. (Bulletin No. 141).

### Mines

*The Short-Circuiting Contactor As an Electrical Protective Device for Coal Mine Service.* By L. H. Harris. Available from U. S. Bureau of Mines, 4300 Forbes Street, Pittsburgh 13, Pa. 1951. 11 p. Free. (Report of Investigation 4759).

### Pipes

*Code for Pressure Piping.* Published by The American Society



## Don't look now — But there's a *Shadow* on your floor

Does it come as a shock that your floor is showing its age prematurely? Are you inclined to attribute it to heavy traffic?

More probably, the excessive wear is the result of *improper* maintenance methods. Prove it to yourself by studying the routine of your cleaning crews.

First they wax—then they strip—then they re-wax. Not only does this subject your floor to gruelling punishment, but it is sheer waste of labor and material.

The Legge System of Safety Floor Maintenance commences with the *reconditioning* of your floor—and follows with a regular program of light upkeep. Legge service is custom-tailored to your needs. We do not operate on the principle of merely selling you a product in a can. Legge Safety Engineers examine your floors, study the composition, condition and traffic burden before recommending the *correct*

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Thousands of plants, buildings and institutions rely on the Legge System to keep their floors in tip-top condition. It costs nothing to get complete data about our service. Simply clip the coupon to your letterhead and mail today for a revealing booklet on scientific floor care. It's free and puts you under no obligation. Will you mail it now, please?

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Title \_\_\_\_\_

Types of flooring \_\_\_\_\_

Area \_\_\_\_\_ sq. ft.

H-5



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of Mechanical Engineers, 29 West 39th Street, New York 18, N. Y. 1951. 101 p. Price \$3.50. (ASA B 31.1).

#### Psychology

*Safety Consciousness—An Evaluation.* By Stanley M. Walker. Available from U. S. Bureau of Mines, 4800 Forbes Street, Pittsburgh 13, Pa. 1951. 8 p. Free. (Information circular 7595).

#### Railroads

*Proceedings.* Association of American Railroads, Safety Section, Transportation Building, Washington 6, D. C. 1950. 165 p.

#### Wood Preservation

*Treatment of Timber.* By F. S. Crawford and J. Howard Bird. U. S. Bureau of Mines, 4800 Forbes Street, Pittsburgh, Pa. 1951. 4 p. Free. (Information Circular 7597).

#### MAGAZINE ARTICLES

##### Cement Industry

*Making the Safety Program Work.* By Stanley C. Herbrine.

(In Pit and Quarry, March 1951. p. 104).

##### Economics of Safety

*Injuries and Your Purse.* (In Engineering News-Record, February 8, 1951. p. 124).

##### Electrical Industry

*Fatal Accidents in the Electric Light and Power Industry.* By D. C. Stewart. (In Edison Electric Institute Bulletin, February 1951. p. 47).

##### Flameproofing

*A New Way to Flameproof Nylon.* By R. C. Axtmann and A. T. Sevel. (In Textile World, March 1951. p. 130).

##### Food Industry

*Putting Safety First in Solvent Extraction Plant.* (In The National Provisioner, February 10, 1951. p. 13).

##### Foundries

*The Health of Ferrous Foundry Worker.* By Harry Heimann. (In Public Health Reports, February 23, 1951. p. 223).

##### Lighting

*Light.* By George Eaton. (In The Inland Printer, February 1951. p. 44).

##### Mines

*Discipline 1951.* By Reese H. Nicholas. (In Mechanization, February, 1951. p. 103).

##### Posters

*Which Safety Poster?* By Albert A. Canfield. (In Factory Management and Maintenance, February 1951. p. 204).

##### Printing and Publishing

*Hold Those Pressroom Falls.* By Lillian Stemp. (In The American Pressman, March 1951. p. 34).

##### Printing and Publishing

*Safety and Spray Products.* (In The American Pressman, March 1951. p. 42).

##### Psychology

*Human Relations and Accident Prevention.* By Leonard E. Himler. (In Industrial Medicine and Surgery, March 1951. p. 121).



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Neoprene palm coated glove for general utility use . . . providing 7-8 times the wear of standard canvas work gloves.



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Full Neoprene coated industrial weight 14 1/2" gauntlet . . . 6" cuff . . . liquid proof . . . curved fingers . . . for all general industry.

## SAFETY STANDARDS?

Keep them high with

HOOD

gloves!

In industry everywhere, companies have standards of safety for the protection of employees. And fortunately the average is high. But to have high standards is one thing—to keep them high is another! And for that reason, when safety is involved for the vital hands of employees, you owe it to your business and employees to investigate the advantages of Hood Industrial Work gloves. Only in this way will you find out, as so many in industry have, that hands in Hood gloves get more protection, are more efficient, get longer wear and extra comfort.

So to help keep your safety standards high, see the whole line of Hood Neoprene, Rubber or Plastic gloves, for every use in all jobs, in the new Hood glove catalog. Once your employees have tried them, you'll see why efficiency starts with better Hood gloves!

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Write today for the colorful new catalog showing the entire Hood line.



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#### Radiation

*Radioactive Materials, You Can Use Them Safely.* Interview with Dr. H. E. Tebrock. (In *Factory Management and Maintenance*, March 1951. p. 82).

#### Training

*Will We Have More Accidents?* By Ralph Leadbeater. (In *Supervision*, March 1951. p. 17).

#### Waste Disposal

*Complex Water-Pollution Problems Solved by Applied Research.* (In *Engineering News-Record*, February 8, 1951. p. 45).

#### Secretary's Salesmanship Cuts Foot Injuries

Toe injuries at the Riverside Metal Company, Riverside, N. J., have shown a marked decrease due to the efforts of the safety director and his versatile secretary.

About a year ago the company's records revealed a relatively high incidence of toe injuries which could have been prevented by safety shoes. L. A. Maron, safety and personnel director, studied the problem, and instituted a program which proved successful in its application to the special local situation. Toe injuries have been reduced by more than 25 per cent.

Ignorance of the existence and purpose of safety shoes, rumors of poor fittings from persons with foot troubles, and a language problem (many workers were Polish and Italian), were the principal difficulties.

Safety committee members were indoctrinated, and Maron wrote a personal note to each employee who worked with heavy metal or equipment.

Hard-to-fit individuals were told that if their safety shoes did not fit properly or were uncomfortable, the company would make every effort to correct the condition.

The language problem was overcome with the aid of Pauline Gorski, Maron's secretarial assistant, who speaks Polish fluently and also understands Italian. Now, in addition to her duties as receptionist, personnel secretary, and record keeper she is safety shoe saleswoman. Records show that safety shoes sales have increased by more than 50 per cent.



improve seeing conditions  
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A service comprising detailed color suggestions tailor-made for you by trained consultants from Glidden Color Laboratories with over 21 years of experience. These comprehensive color harmony plans for interior painting based on Glidden's famous Sight Perfection Program pay important extra dividends! Write Dept. F-5 for complete information about this free service.

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Workers see better, feel better, make fewer mistakes, have fewer accidents after Glidden SPRAY-DAY-LITE or BRUSH-DAY-LITE is used to promote plant safety. To save man-hours, speed production and reduce manufacturing costs, try one-coat painting with America's largest-selling interior maintenance paint.

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## Trained and Alert

(From page 21)

characteristics of a cutting or welding job. Knowing the ways in which fires may start is an important step toward preventing them. Sparks from these jobs are really small globules of molten metal which are thrown out in a heavy shower, particularly in cutting jobs, sometimes for distances of 25 to 30 feet.

Heat sufficient to start fires may come from the acetylene flame itself, but this is a rare cause of fire. Heat from the metal being cut or welded may sometimes cause fires, if the pieces of metal are allowed to touch materials that burn easily. In most cases, fires are caused by sparks. This is more likely to happen when steel or iron is being cut than with non-ferrous materials. In the cutting of steel and iron, many times small pieces are cut away or out of larger sections and allowed to drop on the floor or ground. The smaller the piece which has been cut away, the more heat it will have absorbed, making it more apt to ignite combustible material and flammable liquids.

Pieces of steel and iron heated to a cherry-red may retain enough heat to start fires 5 to 20 seconds

or longer after they have fallen. A piece of steel or iron heated and still remaining black in color, also may be hot enough to start a fire.

The globules and sparks from a cutting job are more likely to start fires in combustible material than are pieces of hot metal, because the globules and sparks are at a temperature of molten steel when they fall, therefore staying hot longer; although, when globules and sparks fall from a height of 15 feet or more, they scatter and cool more quickly than a small piece of metal dropped from the same height.

Stationary cutting and welding used in regular production operations are relatively safe; nevertheless, they should be properly guarded so that sparks do not come in contact with combustible materials and flammable liquids. It is the portable equipment that causes the greatest number of fires. The safest rule to follow is to keep the flame, sparks, and pieces of hot metal from coming in contact with combustible material and flammable liquids. Whenever possible it is better to take cutting or welding work away from its normal location to a safe area.

Before you cut or weld in a location for the first time, be sure to contact someone who is acquainted with the area so that you



Naphtha wash tank designed by the department. It can be closed by a fusible link or by the foot pedal.

will not overlook some combustible material or flammable liquids.

When possible, move combustible or flammable materials and liquids, rather than covering them. If, however, they cannot be moved, be sure to cover them properly with fire blankets or pieces of sheet metal. Be sure blankets are in good condition and that they are weighted down on the floor to prevent sparks and globules of hot metal from rolling underneath.

When blankets have to be overlapped to cover material or equipment, a good rule to follow is to roll under the two overlapping edges. This prevents sparks from getting under the top blanket, and dropping on the material or equipment being covered.

Floors should be swept clean, and if the floor is wood, it should be sprinkled with water. Be sure that all openings, stairways, holes, cracks in the floor, and spaces around pipes, are properly covered with fire-blankets or sheet metal to prevent sparks and globules of metal from falling through to the floor below and igniting other combustible material and flammable liquids.

In some instances, drilling of holes for bolts and rods instead of cutting might be done, especially over serious hazards such as



Here reel designed for cutting and welding. Sprinkler unit in background is used in training to show how it functions and area protected by head.

# GET TRACTION-ACTION



**FLOORSAFE**  
is not a wax  
**FLOORSAFE**  
is a new discovery  
**FLOORSAFE**  
is "everything" in one product

If you are technically inclined, you will be interested to know that FLOORSAFE brings you a brand new application of synthetic resins. Its high coefficient of friction gives it built-in **TRACTION-ACTION**.

FLOORSAFE with **TRACTION-ACTION** was developed, through years of research in the MYCO laboratories, to bring industry and business a new, higher standard of floor safety. It offers all these important benefits in one quick-drying, easy-to-use floor dressing:

- SUPERIOR ANTI-SLIP PROPERTIES
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National Safety News, May, 1951

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change of address

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*The West's Safety Headquarters*

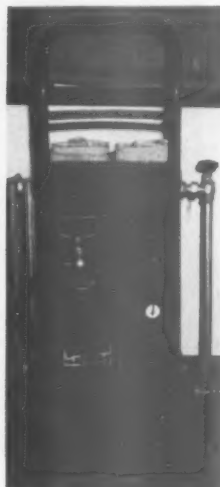


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McDonald SAFE-T-HAT • McDonald SNAKE-BITE KIT  
McDonald KANISTER-KIT • McDonald BURT-WELD LENS  
McDonald REVERSALARM  
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dip and wash tanks, when it is impossible to cover them properly because of other equipment involved. Another precaution is to catch sparks, small pieces, and globules of metal in a pan or bucket of water or soapstone. This is recommended for overhead jobs, but do not rely wholly on this. Cover combustible material or flammable liquids below as you would in any other cutting or welding job.

We have considered the general rules for prevention of fires, but let us not overlook the possibility of a fire occurring, so fire extinguishers must be considered. A



Two-wheeled hand truck adapted to carrying extinguishing equipment to locations of welding and cutting jobs.

fire can be put out with an extinguisher or a bucket of water when it starts, but if permitted to burn a few minutes, may tax the efforts of an entire fire department.

Before cutting or welding jobs are started, all of the rules previously mentioned should be complied with. A check should then be made to see that adequate fire extinguishers are available. If building is sprinkled, be sure sprinkler system is in service and remains in service while cutting and welding job is being done. Much may be said about cutting and welding in regard to the proper maintenance of equipment.

Leaking hose or valves on oxygen or acetylene tanks should never be permitted on cutting or welding jobs. Care should be taken to use correct pressure of oxygen and acetylene. On arc welding jobs special care should be taken in using the correct amount of current.

If these rules are followed, excessive sparks and globules of metal will be eliminated.

#### **Watch the Housekeeping**

Constant good housekeeping to prevent fires and instantaneous action to extinguish fires, might be termed the twin keynotes of our fire prevention program. Experience has convinced us that the one most important factor in preventing fires is good housekeeping. In our fire brigade schools, on our bulletin boards, and in our plant paper, we urge each employee to protect his life and job through cleanliness, orderliness and constant watchfulness.

We constantly remind our firemen that the first five minutes of any fire is a more critical period than the next five hours. We train them to be ready to do the right thing—right now! Our "golden rule" is *B-Ready, B-Calm, B-Quick and B-Right*.

As a result of our program, which is backed by management from the general manager on down, we have a group of employees who are fire-conscious. Accordingly, the number of fires started in our plants is very small. But, when fire does come, we have the equipment—inspected and ready—and men trained to cope with the situation.

In short, our program has paid off in a big way.

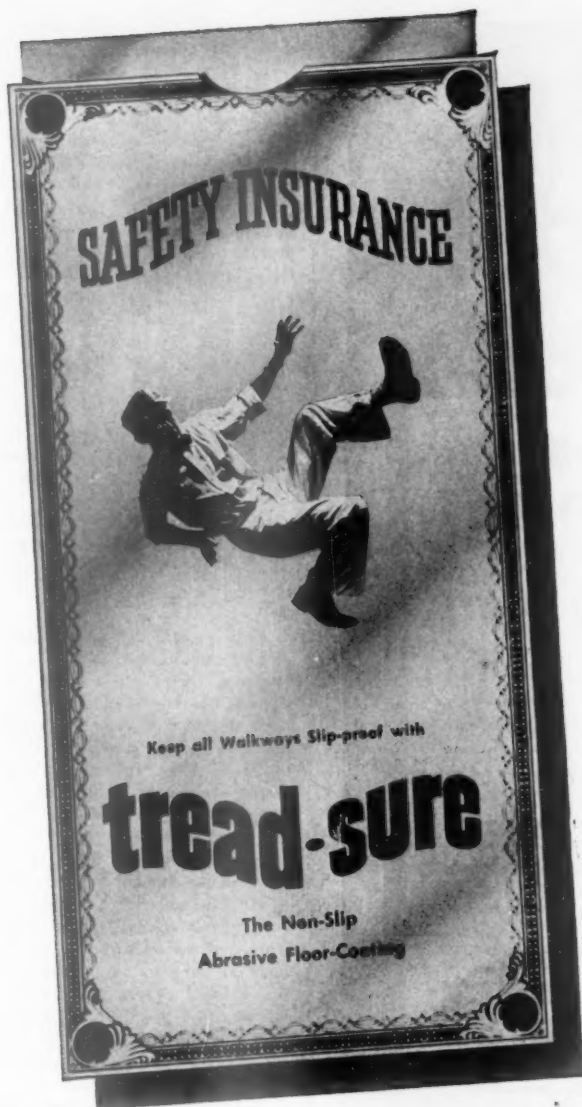
#### **We Owe It to Our People**

—From page 19

The cost of this program in 1949 was \$300,000, or about \$35 per employee—roughly two cents per man-hour.

To many of you with small plants, such a program as I have outlined may seem impossible. At first we thought the same because our small plants are spread from coast to coast in 19 states and 33 communities. Yet, we have found the cost of the program in a plant





Horn Tread-Sure produces a heavy long-wearing anti-skid surface on wood, concrete or steel. Tread-Sure is an abrasive filled brush-coating, simple and inexpensive to apply on any size area.

Tread-Sure is resistant to gasoline, alcohol, oil, grease, detergents, industrial waste and many types of acids. Tread-Sure provides a non-skid safety footing, giving the worker confidence and security by reducing accident hazards.

Tread-Sure maintains traction and resiliency and is comfortable to stand on. Designed for exterior as well as interior use, it may be brush applied over other paint or direct to unpainted surfaces. Used as it comes from container. Three non-glare colors—Battleship Grey, Red, Green.

#### Uses for Tread-Sure

Steps and stair treads  
Aisles—walkways  
Ramps—gangplanks  
Grease racks—work benches  
Running boards  
Washrooms—showers  
Elevator floors—landings  
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Decks—hatch covers

#### Used in

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Food,  
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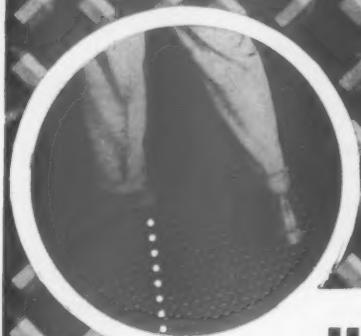
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### **STEP ON IT ... IN SAFETY!**

Hurrying workers have better protection with U·S·S Multigrip underfoot. Wet or dry, Multigrip's evenly-spaced, flat-topped risers offer positive traction in every direction. Vehicles roll easier on Multigrip, too. There are no gutters to catch narrow wheels . . . vehicles roll on the risers, not between them.

Multigrip Floor Plate makes floors stronger, longer lasting. It's attractive, easily cleaned . . . there are no pockets to hold dirt, grease, water. And it's permanent. Get further information about Multigrip from your nearest steel warehouse, or write to us direct.



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**MULTIGRIP FLOOR PLATE**

**UNITED STATES STEEL**

of 50 people only slightly higher than in the larger plants.

Out of our experience, we believe a company with a single plant employing 100 people could have an effective program for a cost of approximately \$27 per employee per year—one and a half cents per man-hour. This would include the services of a part-time doctor, a part-time nurse and taking advantage of the free services of state and local agencies in industrial hygiene and X-ray programs. It is essential that the doctor know intimately your plant and its conditions.

To offset the cost, there are many direct benefits from our medical and hygiene program which show up as immediate savings.

For instance, the cost per case of lead intoxication has been reduced from \$92.40, which it was several years ago, to \$10.78 in 1949.

While we still have a few cases of lead intoxication, in our most hazardous plant, the rate of incidence has been reduced by 85 per cent and the number of working days lost reduced from 1274 to 25 in 1949. In some bronze casting foundries, the incidence rate has been reduced to zero in the last few years.

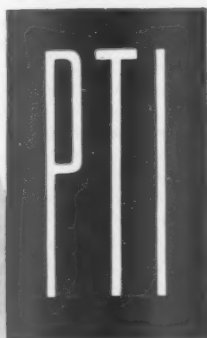
Similar reductions have taken place in the number and severity of silicosis and siderosis cases in recent years. Also, experimental work and research by the department at Saranac has emphasized the need of proper diagnosis of silicosis and siderosis. This was paid for by our company and turned out to be a good investment.

#### **Expenditures Justified**

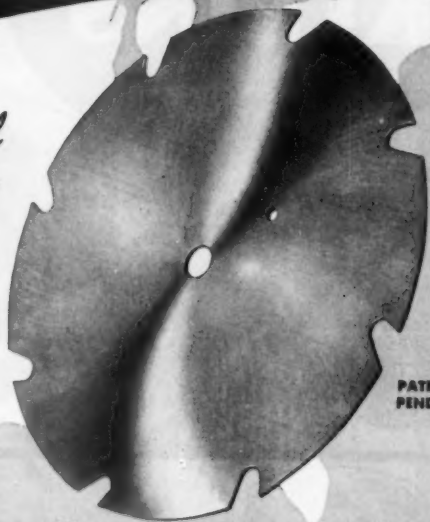
Through the efforts of our industrial hygiene engineers in eliminating hazardous conditions, we have secured sharply reduced occupational disease insurance rates in several plants. Also, cooperation with state labor departments has eliminated the necessity of several costly installations when the state departments' engineers were made aware of our own program of continuing surveys by our own hygiene engineers in an effort to reduce hazardous conditions.

In different businesses there are

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*the original*  
**SAFETY  
SAW  
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## TESTED AND APPROVED

The PTI Cut Control Saw Blade is the first and original blade of this type. It was developed by one of the world's foremost saw manufacturers—and then thoroughly tested in the leading shops and laboratories of Europe and America for more than two years. It is the first saw blade of this kind tested by the Forest Products Laboratories, Madison, Wis., Timber Engineering Company, Washington, D.C., the University of Zurich, Switzerland, and other testing laboratories with favorable reports issued in every instance.

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1. Complete safety from kick-backs; 2. Reduced possibility of direct injuries; 3. Cuts chips, not sawdust; 4. 30% to 40% power saving; 5. Longer life without sharpening; 6. Smooth cutting; 7. Quieter running; 8. Less danger of blade cracking; 9. Made of chrome Vanadium Steel; 10. Available with solid tooth or carbide tipped.

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7" dia. blade \$4.95 12" dia. blade \$ 9.40  
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5249 Tool Belt with Sliding Trace



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The remarkable record of safety made by utility companies over the years is due in no small measure to the equipment used by the men on the job.

For nearly a century the name Klein has stood for the finest in pliers and climbers, safety straps and belts, grips and wrenches.

Men whose lives depend on the equipment they use realize there can be no substitute for quality. The name Klein is generally accepted as standing for the finest in linemen's and electricians' tools and equipment.

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The Klein Pocket Tool  
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useful information, will  
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different yardsticks which are used in sizing up the advisability of new investments in plant and equipment. When I came to Brake Shoe in 1911, the bosses felt a major capital expense proposal was not warranted unless it would pay for itself in five years. Equipment replacements were expected to pay for themselves in one year. Today, ten per cent is probably the average idea of needed return on important expenditures and 20 to 30 per cent on minor changes.

At last we have reached a point where investments in medical departments and better working conditions are accepted generally as necessary without any presentation of estimated savings to our boards.

Owners of a manufacturing plant or foundry want profitable operations. They think in terms of the years ahead. If experienced in what goes on within the plant walls, they know any plant without adequate medical, hygiene and safety supervision is heading into trouble.

Size of company or size of plant is no acceptable alibi. The management that has not already found this out is in for a bad drubbing, not only through lack of ability to compete successfully for the better man in its community, but also due to the direct and indirect costs of such failure.

A clean plant, good light, proper temperatures, a well-organized safety program, an effective medical department, a pension plan, life and health and accident insurance, are all part of our package. The costs are substantial, but I can unhesitatingly assure any stockholder that our year's earnings are improved by these expenditures.

#### Improved Relations


Labor turnover and absenteeism are materially reduced. People turn out more work of better quality because working conditions are better. Also they are more effective because they realize we are determined to do everything we can to give them what we would wish if we were in their places. We are not talking it to them—we are proving it. As we continue to improve, the profit on these expenses will increase.

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**Hydraoxated carnauba floor wax  
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Come rain or shine, radically new SUPER SAFE CETOX gives genuine security underfoot on dazzling, beautiful floors.

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Here's important protection all year long—especially throughout year's 30% inclement weather when the risk of slips and falls is greatest. Snow, sleet and rain tracked onto a waxed floor acts as a lubricant underfoot. SUPER SAFE CETOX ends this hazard. Foot traffic has solid, secure footing on a CETOX dressed floor . . . whether wetted or

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SUPER SAFE CETOX quickly dries into a smooth expanse of brilliant lustre. Self-lustre CETOX resists soil, wear, spilled water and frequent damp moppings. In every way CETOX is superior! Ask your distributor for SUPER SAFE CETOX today, or send us his name.



**SUPER SAFE, RAIN OR SHINE**

Listed anti-slip floor treatment material  
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## **Chemical Service of Baltimore**

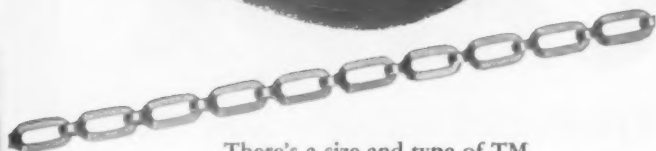
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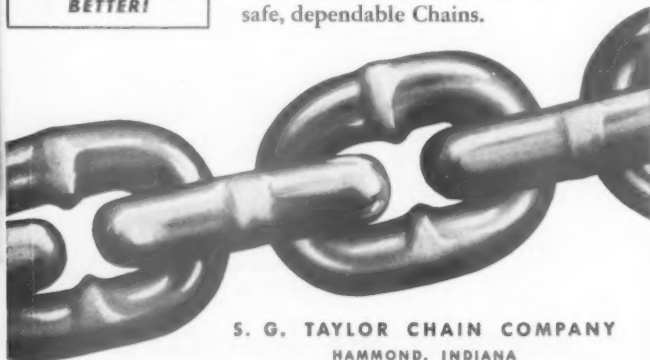
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the relations of our nurses with the men and their families.

Experience in our company with its plant nurses has shown them to be one of the most important influences in building employee confidence and friendship. They must have the necessary medical skill. But medical skill alone is not sufficient. They must be fine human beings determined to make life better for other people.

In every company there are many incidents which, from day to day, prove their high value, show their opportunities. Largely, they have to do with the nurses and the workmen's families. Obviously, in small plants such as ours, family opportunities are easier to find.

Late one night, an employee's wife telephoned the company nurse. What should be done about "Butch," her six-year-old son. He had a bad cut on his hand. The nurse advised seeing the plant doctor, and, in an hour, "Butch's" arm was dressed and he had had a shot of penicillin.

A youngster, bicycling dad's lunch basket to the plant, was hit by a car. The nurse handled the medical aspects and secured a company lawyer who won the lawsuit.

A nurse was told the delinquent daughter of a woman employee was missing. After many weeks, she found the girl, and, with the aid of social workers, rehabilitated her.

My favorite incident happened several years ago. Two little children, carrying a stunned dog, pushed violently on the front door bell. "You're the company nurse. Our dog doesn't move. Do something about it." In trouble, those children automatically ran to our company nurse. Those children had faith in company people.

These nurses are proving to Brake Shoe families that our friendship is real.

What a company provides in the way of industrial medical care, nursing and industrial hygiene makes a pretty accurate gauge of the company's sincerity of purpose, both to its employees and to the community.

I also want to point to the value of our X-ray program in uncovering cases of tuberculosis. From

60 trillion  
anti-slip "Ludox"  
particles under  
her heel

MAKE EACH STEP ON THIS  
WAXED FLOOR FAR SAFER



More and more businesses, stores, hospitals, schools and other public buildings are now using the new anti-slip waxes containing Du Pont "Ludox" colloidal silica. Tiny "Ludox" particles in floor waxes give new safety to walking.

Waxes containing "Ludox" have extra hardness. And waxes properly formulated with "Ludox" are fully equal to regular floor waxes in gloss, water-resistance, freeze-resistance and leveling. With all these advantages, you can see why waxes containing "Ludox" are specified by many safety and sanitation engineers.

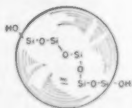
There are many different formulations already available to meet the specialized needs of institutions, business and industry. New anti-slip floor waxes containing "Ludox" are continually being developed by wax manufacturers in cooperation with Du Pont research men.

Make a point of asking your wax supplier to show you how his products containing "Ludox" help solve your floor-wax problems.

Grasselli Chemicals Department, E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.

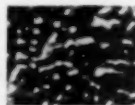
#### THE ACTION OF "LUDOX" IN WAXES

results from the structure of the individual colloidal silica particles. Each particle is a smooth, minute sphere—about one two-millionths of an inch in diameter. These spheres are clear and give wax films added transparency and depth of lustre.



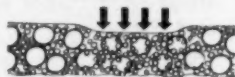
#### GIVES WAX MORE HARDNESS

Each wax particle gains extra hardness by being covered with many smaller, harder "Ludox" particles distributed throughout the wax film. This is shown in the electronphotomicrograph of the surface of a wax film, magnified 25,000 times.



#### GIVES WAX ANTI-SLIP PROTECTION

The pressure of a foot pushes the harder "Ludox" particles into the softer wax particles. The snubbing action which results makes the wax slip-resistant.



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capacities, pressures and  
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**U. S. HOFFMAN**

MACHINERY CORPORATION

AIR APPLIANCE DIVISION

101 FOURTH AVE., NEW YORK 3, N.Y.  
CANADIAN PLANT, NEWMARKET, ONT.

1946, through 1949, some 120 cases were found. They would have gone undetected had it not been for the program. We have been able to rehabilitate most of these cases and get them back to work.

There are business problems which can't be turned into cold figures, even though some financial writers don't realize it. A man in one plant told me he would not be working if our doctor had not detected his tuberculosis in time. He said he owed his ability to work and provide for his family to our company doctor. How could even Einstein figure what that meant in dollars to Brake Shoe? His family knew the facts. It was a small plant and I guarantee every plant family knew all about it, too. How many dollars of medical department expense that incident offset, I don't know. I do know that it made a happy day for me, and more than offset the day's bad business news.

It is my conviction that we are now getting a material benefit, which alone is equal to the expense of the medical department from the fine, human things they do, from daily proof of high interest in the individual. Benefits to earnings, both tangible and intangible, after the extra costs, leave, without doubt, a handsome profit. Owners cannot afford managements who do not recognize these facts.

**Making the Program Effective**

Planning health and safety is simple. Making it function effectively is another story. It is extremely difficult. It cannot be done by edict. It can be done only by teaching. The doctor's approach must be teaching—a minimum of telling.

The best sales people know that their first need is customer's confidence of plant supervision. In our early experience, there was often resistance from operating people who suspected the medical people of trying to run their show. Once they understood the fundamentals and were successfully sold on their importance, the picture changed. Today, on the part of practically every supervisor in each of our 54 plants there is fine cooperation. They now recognize that the medical and safety program pays dividends and get a

great kick out of the knowledge that many families feel we add to their sense of security.

It takes good selling ability on the part of a medical staff just as it does for the family doctor in his "bedside manner." Shall we say in our work "a good plant-side manner" takes both good teaching and good selling?

The company doctor must be of high medical integrity; unwilling to compromise his medical opinion to conform with ill-advised wishes of the company; more jealous of his standing and reputation as a medical man than his place in the company.

He must go to bat for moral standards and high ideals in the medical program, and be willing to resign if they are not lived up to, otherwise the employees' faith and confidence in the program will fail completely.

I have stated some obvious examples of the necessary basis of carry-on in other talks on this subject. They are:

1. A completely frank and open sharing with the employees of physical conditions discovered in health surveys. In Brake Shoe, Dr. Hamlin tells silicotics that they have silicosis.

2. A rigid procedure of handling occupational claims solely on the basis of the medical factors, irrespective of personal factors which might point to different handling.

3. A strict observance of the doctor-patient relationship, medical files must be privileged.

4. Physical examinations must not be used for "weeding out." An employee should never be discharged as a result of findings of a physical check-up. However, if essential to his health, a change in type of work often is indicated. Further a pre-employment examination should be considered as a "pre-placement" examination for the express purpose of placing a man at a job which he is physically able to handle.

The doctor should be a willing fighter in the battle for better working conditions. He must feel a responsibility to every man, every woman in the company, and to their families. As between management and workers, he must visualize his responsibility to be that of the workers' representative at the management table. In every locality, there are such doctors.

The doctor should be the kind of person from whom the president does not object to taking orders.

# Stonehouse Stock-Worded INDUSTRIAL GOOD HOUSEKEEPING Steel Signs

<b>THINK</b> ANY WORDING DESIRED MAY BE PLACED IN THIS BLANK SPACE AT ADDITIONAL COST 1319	<b>NOTICE</b> EQUIPMENT IN YOUR DEPARTMENT MUST BE <b>THOROUGHLY            CLEANED</b> AFTER EACH DAY'S WORK 1319	<b>NOTICE</b> FOR SANITARY REASONS YOU ARE REQUESTED TO <b>HELP KEEP THIS PLACE            CLEAN</b> REPORT ANYTHING OUT OF ORDER 1321	<b>THINK</b> <b>HELP KEEP DIRT OUT</b> CLEAN TOILET ROOMS MEAN GOOD HEALTH <b>IT'S UP TO YOU!</b> 1410
<b>CAUTION</b> <b>DEPOSIT</b> <b>MATCHES AND ALL</b> <b>SMOKING MATERIAL</b> <b>IN THIS RECEPTACLE</b> 1010	<b>CAUTION</b> <b>THIS SPACE</b> <b>MUST BE KEPT</b> <b>— CLEAR —</b> <b>AT ALL TIMES</b> 1076	<b>HELP</b> <b>KEEP THIS PLACE            CLEAN</b> 911-E	<b>CAUTION</b> DO NOT THROW ANY MATCHES RUBBISH CIGAR OR CIGARETTE STUBS IN URINALS 1060-A
<b>CAUTION</b> <b>SPITTING</b> ON THE FLOOR INTO CORNERS AND OUT OF THE WAY PLACES IS UNLAWFUL UNHEALTHY UNSANITARY AND DANGEROUS IT WILL NOT BE TOLERATED 1013	<b>CAUTION</b> <b>DO NOT SCATTER PAPER</b> <b>AND TRASH ON FLOORS</b> <b>THIS IS YOUR HOME</b> <b>SIX DAYS OF THE WEEK</b> <b>HELP KEEP IT CLEAN</b> 1021-D	<b>NOTICE</b> <b>PUT THINGS BACK IN</b> <b>THEIR PROPER PLACES</b> <b>AND YOU WILL FIND THEM</b> <b>WHEN YOU WANT THEM</b> 1321-A	
<b>NOTICE</b> <b>DUMP NO</b> <b>RUBBISH</b> <b>- HERE -</b> 1301-A	<b>CAUTION</b> <b>KEEP</b> <b>AISSLES</b> <b>CLEAR</b> 1003-A	<b>WASH YOUR HANDS</b> <b>BEFORE LEAVING THIS ROOM</b> 936	
<b>UNIVERSAL            SAFETY</b> SPITTING SPREADS DISEASE <b>DO NOT SPIT</b> IF YOU MUST USE CUSPIDOR 2201	<b>ALL HANDS</b> <b>ARE REQUESTED TO</b> <b>HELP</b> <b>KEEP THIS PLANT</b> <b>SAFE</b> <b>AND CLEAN</b> 906-A	<b>UNIVERSAL            SAFETY</b> <b>SPITTING</b> <b>ON FLOORS</b> <b>AND</b> <b>STAIRWAYS</b> <b>MUST BE</b> <b>STOPPED</b> 2216	
<b>NOTICE</b> HANGING CLOTHING IN LOCKERS DIRTY LET OLD CLOTHING DRY WASTE RAGS OR PAPER ACCUMULATE ON LOCKER FLOORS PLACE ALL REFUSE IN THE CONTAINERS PROVIDED 1327-A	<b>MAKE</b> <b>ORDER</b> <b>AND</b> <b>CLEANLINESS</b> <b>A HABIT</b> 912-M	<b>PRACTICE</b> <b>GOOD</b> <b>HOUSEKEEPING</b> <b>A PLACE FOR EVERYTHING</b> <b>—AND—</b> <b>EVERYTHING IN PLACE</b> 972-L	<b>NOTICE</b> <b>POSITIVELY DO NOT</b> <b>THROW ANY WASTE OR</b> <b>RUBBISH OF ANY KIND</b> <b>IN TOILET.</b> 1352-B
<b>KEEP ALL TRASH</b> <b>PICKED UP AND</b> <b>PLACED IN THIS</b> <b>RECEPTACLE</b> 1062-A	<b>SAFETY</b> <b>FIRST</b> <b>PLEASE DO NOT</b> <b>SPIT ON THE FLOOR</b> 426	<b>GOOD</b> <b>HOUSEKEEPING</b> <b>IS THE</b> <b>KEYNOTE</b> <b>TO</b> <b>SAFETY</b> <b>CLEANLINESS</b> <b>ORDER</b> <b>AND A PLACE FOR</b> <b>EVERYTHING</b> <b>ARE ESSENTIALS OF</b> <b>SAFETY</b> 914-M	<b>SAFETY</b> <b>FIRST</b> <b>HELP KEEP THIS</b> <b>— PLANT —</b> <b>SAFE AND CLEAN</b> 487
<b>BE</b> <b>CAREFUL</b> <b>EXAMINE YOUR</b> <b>WORKING PLACE WELL</b> <b>BEFORE STARTING TO WORK</b> 718	<b>BE</b> <b>CAREFUL</b> <b>KEEP THIS PLACE</b> <b>CLEAN AND ORDERLY</b> 772	<b>CAUTION</b> <b>DO NOT THROW RUBBISH</b> <b>INTO TOILET BOWLS</b> <b>PENCILS FOURTH PICES</b> <b>MATCHES CLOTH ETC</b> <b>PLUG TOILETS</b> 1089-A	

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In addition to the rugged, all-metal Kinnear Rolling Door—featuring the famous Kinnear-originated "curtain" of interlocking slats—it presents other Kinnear upward-acting doors. These include the sectional-type Kinnear RoL-TOP Doors (wood or all-metal), Kinnear Bi-Fold Doors (wood or all-metal), featuring two sections that "jackknife" upward and out of the way, and Kinnear Steel Rolling Fire Doors, the interlocking slot doors with special features for maximum fire safety. Kinnear Steel Rolling Grilles for protection that does not block light, air, vision, or sound are also shown. Write for this new Kinnear Catalog today!

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And, incidentally, it is helpful if the whole organization knows just that.

As prerequisites of sound industrial relations, industrial medicine and hygiene are here to stay. The desirability of initiating a program rather than being forced into it through pressure from unions or competitors is apparent. The fact that more and more industrial concerns are setting up medical programs is evidence that they are just as essential to the organization as any other department is. Recognizing this, no industrial program should be initiated without a definite understanding by all executives as to its being a permanent part of the company structure, even when the ink is red. You get nowhere if people in supervision think it a trial balloon.

With this department strong, all principal officers will be more effective, because each and every one will take an interest in the program, and through that experience be more competent in human relations. Pride in their company, and their happiness on the job will increase.

## Personals

WILLIAM L. CONNOLLY has been appointed chairman of the Federal Safety Council. He will take over his new assignment in addition to his present duties as director of the Department of Labor's Bureau of Labor Standards, as announced by Secretary of Labor Maurice J. Tobin.

The Federal Safety Council was established in the United States Department of Labor by Presidential Executive Order No. 10194 of December 20, 1950. It replaces the Federal Interdepartmental Safety Council.

Duties of the Council involve advising the Secretary of Labor with respect to the development and maintenance of adequate and effective safety organizations and programs designed to eliminate work hazards and health risks and to prevent injuries and accidents in Federal employment. The Council will also cooperate with Secretary Tobin in carrying out his



responsibilities under the Federal Employees Compensation Act.

Mr. Connolly, who was formerly Director of Labor for the State of Rhode Island, has been director of the Bureau of Labor Standards since 1947. In 1948 he was called upon by the Secretary of Labor to organize the President's Conference on Industrial Safety, and has served as chairman of the coordinating committee of that organization since its inception.

JONATHAN N. RAWSON has been appointed Director of Industrial Activities for the Brown & Sharpe Manufacturing Company of Providence, R.I. Mr. Rawson, who joined the Brown & Sharpe organization in 1941, will direct the health, safety, welfare and recreational activities. For the past several years he has devoted his efforts to industrial relations.

Vice-President of the Community Workshops of Rhode Island, Mr. Rawson attended Hamilton College in Clinton, N. Y. He is secretary of the Rhode Island Industrial Safety Association and a member of the Personnel Executives Club of the Providence Chamber of Commerce.

HAROLD R. ALLEY, chemical engineer and paper technologist, has joined the Industrial Department of the National Safety Council. He will be staff representative of the Pulp and Paper Section and the Glass and Ceramics Section of the Council.



H. R. Alley

**COULD ANYTHING BE MORE CONVINCING THAN YOUR OWN EXPERIENCE?**

Then give HERC-ALLOY the toughest chain job in your plant. Our asking for this test reflects the confidence given us by HERC-ALLOY service records from industry's leading plants.

**HERC-ALLOY STEEL CHAIN**

**HERC-ALLOY** is America's **first alloy** steel chain. For slings or other applications **HERC-ALLOY Chain** will prove that efficiency, safety and economy can go hand-in-hand.

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**GENERAL OFFICES AND FACTORIES: TONAWANDA, N. Y.**

**SALES OFFICES: NEW YORK • CHICAGO • CLEVELAND • SAN FRANCISCO**

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# Make These Difficult Cleaning Jobs Simple! *Clean fast, Easily*

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## DIVERSEY ELEKTRO-PURJ-IT

**Multi-purpose  
Cleaning Compound  
Costs Less Than 2 cents a Gallon**

Now clean-up crews everywhere can make their job surprisingly easy, simple and fast! In literally thousands of plants throughout America, Diversey Elektro-Purj-It has proved its superiority over other general cleaners! Think of it! Elektro-Purj-It solutions actually cost less than 2 cents per gallon . . . yet loosen dirt and grease as fast as lightning and easier than you ever hoped possible!

Elektro-Purj-It is dustless and non-caking . . . convenient to use. Why not make your job easier? Investigate Elektro-Purj-It today. Write for free samples.

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**FREE SAMPLE!** See for yourself how amazingly fast, easy and simple general cleaning really can be. Select a tough cleaning job in your plant and compare Elektro-Purj-It with any other cleaner. See the difference on one of your own cleaning problems! Write for your free sample. No obligation.

## REMEMBER... QUIK-SIL AND AQUA-LIC FOR EASY FLOOR MAINTENANCE AND SAFETY!

Quik-Sil and Aqua-Lic are specially compounded to completely and quickly absorb dangerous oil, grease and water-base substances from floors, thus helping to prevent slipping accidents and fire. Write for free samples.



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Sky Lights

Mr. Alley is a graduate of the University of Kansas and also has studied at the University of Chicago and Northwestern School of Commerce. He has had industrial experience in the fields of petroleum, electric utilities, paper and paper converting, and general manufacturing. He has acted as a consultant in research, production and sales and recently returned from a one year trip to the Far East as an industrial engineer for the Department of Army. While in Japan and the Ryukyus Islands, he worked with the native governments and industrialists in effecting the rehabilitation of native industries in both Japan and the 140 islands of the Ryukyus following World War II.

In the past Mr. Alley has written numerous technical and business articles pertaining to his work and activities in both peace and war time.

ELIOT P. MARCONI, senior engineer on the staff of the Industrial Department, NSC, since February 1945, resigned March 31 to become associated with Aro, Inc., in the field of aeronautical research. Mr. Marconi will be stationed in St. Louis for a time before moving to the plant site in Tennessee.

In May 1945, "Pete" Marconi left for service with the U. S. Navy, returning to the Council April 10, 1946. He was staff representative for the Aeronautical Industries, Air Transport and Pulp and Paper Sections, and was widely known for his work in the development of visual aids in safety training and his many talks on the subject throughout the country.

### Outstanding Films Win Awards

Five motion pictures and three sound slidefilms have been chosen by the National Committee on Films for Safety as the outstanding accident prevention films produced in 1950.

Five additional films were given honorable mention and nine others were picked for merit awards. The committee, which represents 20 national organizations, makes annual awards for safety films in the



fields of traffic, occupational, home and general safety.

The complete list of 1950 award winners follows:

**Non-Theatrical Motion Pictures General**

**Winner:** "Once Too Often," produced by U. S. Army Signal Corps for U. S. Army.

**Honorable Mention:** "Shooting Safety," produced by Sound Masters, Inc., for Sporting Arms and Ammunition Manufacturers Institute.

**Award of Merit:** "The Torch," produced by the Patheoscope Co. for National Board of Fire Underwriters.

**Occupational**

**Winner:** "Make No Mistake," produced by Gulf Coast Films for Geophysical Service, Inc., Dallas, Tex.

**Honorable Mention:** "Before the Blast," produced by Aetna Casualty & Surety Co. for Aetna Life Affiliated Companies. "Safety Precautions for Electronics Personnel," produced by Leslie Roush Productions for U. S. Navy.

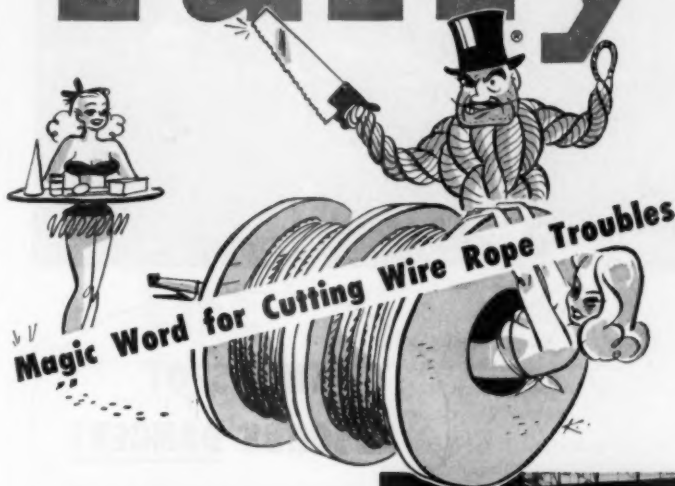
**Traffic and Transportation**

**Winner:** (tie) "A Closed Book," produced by Wilding Picture Productions, Inc., for Farm Bureau Insurance Companies. "And Then There Were Four," produced by Roland Reed Productions for Socony-Vacuum Oil Co.

**Honorable Mention:** "Your Permit to Drive," self-produced by General Motors Corp.

**Award of Merit:** "Look What You're Missing," produced by Master Motion Picture Co. for Liberty Mutual Insurance Co. "Safe on Two Wheels," produced by Aetna Casualty & Surety Co. for Aetna Life Affiliated Companies. "Ser-

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Just say or write the magic word "Tuffy" to your Union Wire Rope distributor—plus the length and diameter you need and the special purpose for which you require extra performance. See distributor listing in phone book, yellow section, or write us.

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Tuffy Slings employ a patented braided wire fabric construction. 10 types factory fitted.



Tuffy Dragline casts better, stands up longer to move more yardage.



Tuffy Scraper Rope, glutton for the terrific punishment imposed by these earth movers.



## THIS SPOT ABSORBS DANGER!

**T**hat small spot is important to you. It's your protection against two of the most common industrial dangers—falls and fires resulting from waste oils, paints and other liquids.

The light spot is Wyandotte Zorball—the all-purpose floor absorbent that quickly removes these hazards. Just spread Zorball on the floor and immediately you have a safe, non-skid surface. Just sweep up the oil-soaked Zorball and immediately you have removed the danger of having these hazardous wastes cause fire.

Unlike any competitive floor absorbents, Zorball always maintains its original form! Even when saturated! Zorball never cakes, packs or forms "mud." Ask your Wyandotte Representative to demonstrate Zorball, the safest floor absorbent.

P.S.—If you're having any type of cleaning problem, consult Wyandotte for free technical information and service.



**WYANDOTTE  
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- removes oils immediately
- gives lasting protection against fires
- is safe and economical
- harmless to wood, skin, metal, rubber
- will not break down and form "mud"
- does not cling to shoes

**THE WYANDOTTE LINE**—products for burnishing and burring, vat, electro, steam gun, washing machine and emulsion cleaning, paint stripping, acid pickling, related surface treatments and spray-booth compounds. An all-purpose floor absorbent: Zorball. In fact, specialized products for every cleaning need.

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geant Bruce Reporting," produced by R. B. Clardy for Lumbermens Mutual Casualty Co. "We Drivers," produced by Jam Handy Organization for General Motors Corp.

### Theatrical Motion Pictures

**Winner:** "Wrong Way Butch," produced by Metro-Goldwyn-Mayer.

**Honorable Mention:** "Danger Sleuths," produced by RKO Pathe, Inc.

### Theatrical Trailers

**Award of Merit:** "Deadly Odds" (and others), produced by Atlas Film Corp. for National Safety Council.

### Sound Slidefilms

#### General

**Winner:** "Shocking Conditions," produced by Paragon Pictures, Inc., for Zurich-American Insurance Companies.

#### Home

**Award of Merit:** "Home Safety and Health Departments," self-produced by Public Health Service, Federal Security Agency. "Where's the Fire?" self-produced by Liberty Mutual Fire Insurance Co.

#### Occupational

**Winner:** "Freight Handling," produced by Sarra, Inc., for National Safety Council.

**Award of Merit:** "Speaking of Safety" (series of six), produced by Sarra, Inc., for National Safety Council.

#### Traffic and Transportation

**Winner:** "Caution at the Crossroads," produced by Vogue-Wright Studios for National Association of Automotive Mutual Insurance Companies.

The National Committee on Films for Safety represents the following national organizations:

American Association for Adult Education, American Association of Motor Vehicle Administrators, American Automobile Association, American National Red Cross, American Public Health Association, American Society of Safety Engineers, Association of Casualty and Surety Companies, Association of Safety Council Executives, and Automotive Safety Foundation.

Other organizations represented on the committee are: International Association of Chiefs of Police, National Association of Manufacturers, National Associa-

tion of Mutual Casualty Companies, National Commission on Safety Education, National Fire Protection Association, National Retail Farm Equipment Association, National Safety Council, U.S. Junior Chamber of Commerce, U. S. Navy, U. S. Public Roads Administration, and U. S. Army.

John B. McCullough, director of technical services, Motion Picture Association of America, is chairman of the committee.

\* \* \*

A list of the 72 films entered in the contest may be obtained by writing to William Englander, secretary of the National Committee on Films for Safety, c/o National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill. This list contains full details about each film, including running time, color or black and white, and whether available for television.

### Public Health Magazine Changes Name

WITH THE APRIL 1951 issue, *Industrial Hygiene Newsletter*, published by the U. S. Public Health Service, Federal Security Agency, becomes *Industrial Health Monthly*.

The purpose and policies of the publication will remain the same. It will continue to serve as a medium for the interchange of news among state and local hygiene staffs and developments in industrial health activities over the nation. Material is selected for its value to industrial managers, physicians, nurses, chemists, engineers, labor leaders and educators, as well as government hygienists.

If an organization has to raise money to pay expenses, it doesn't have much energy left for anything else. On the other hand, if the money is found for expenses by endowment or something like that, the organization goes into a deep slumber.—*William Feather*

Instead of tryin' to find so many new things maybe we'd all be better off if we tried to understand some of the old ones.

Aviation won't be really safe until they do away with the ride to the airport.

National Safety News, May, 1951

Wherever  
there's vibration...  
get

## AT LEAST TWICE THE SERVICE LIFE

of ordinary vaporizing liquid extinguishers  
with **PYRENE**  
Vehicle Type Extinguishers



Constant vibration can cut short the life of most vaporizing liquid fire extinguishers.

Not so with Pyrene® 1 qt. and 1½ qt. Vehicle Type Extinguishers. When subjected to vibration, they'll give at least twice the life of ordinary extinguishers.

A special vibration dampener holds the Pyrene pump mechanism firmly in place, protecting it against both vertical and horizontal vibration. And tough brass linings guard the valve housings in every spot where wear would occur. *No other extinguisher offers these vital added construction safeguards.*

In competitive vibrating-machine tests (the most rigorous of such tests known) a Pyrene Vehicle Type Extinguisher outlasted three other major brands by more than 2 to 1... the ratio going as high as 15 to 1. (Chart shows details.) And there is not one single known instance of the Pyrene heavy-duty mechanism wearing out in actual operation.

Lower price doesn't pay when you get half the life! Buy on facts... buy Pyrene!

\*T.M. Reg. U.S. Pat. Off.

**Pyrene**  
FIRE  
EXTINGUISHERS

PYRENE MANUFACTURING COMPANY  
583 Belmont Avenue • Newark 8, N.J.  
Affiliated with C-O-Two Fire Equipment Co.





**Know**  
**SLING CHAINS**  
and how to use them

"C" TYPE  
(With ring on each end)

"S" TYPE  
(grab hook and pear-shaped link)

"3" TYPE  
(sling hook and ring)

"D" TYPE  
(With pear-shaped link)

"M-4" TYPE  
(Four-ring branches)

STANDARD SLING-CHAIN TYPES

**If you use Chain,  
Specify MCKAY  
Engineered CHAIN**

Get to know the standard sling-chain types and their functions. *It will save you time for—* with the right sling you can hook onto loads better, faster and easier. *It will save you money for many "standard" slings are available for doing jobs which you think call for "specials."* Next time you need chains, check with McKay. The McKay "Engineered" line gives you the exact type, size and grade of iron, steel and alloy chains for every need.

**Send for the MCKAY  
SLING-CHAIN KIT**

It gives standard sling-chain specifications and shows how to specify slings and other chains used in plants and shops.

THERE'S A  
MCKAY CHAIN  
FOR EVERY JOB

**THE MCKAY COMPANY**  
445 MCKAY BUILDING  
PITTSBURGH 22, PA.

## Governor Presents State Trophy



**GALA DAY** at Berwick plant of American Car and Foundry Company. President Hardy addresses employees after Governor (now U. S. Senator) Duff presents Commonwealth of Pennsylvania's Certificate of Honor in recognition of its safety record. Right: Governor Duff commends employees on their record.



A NEW SAFETY RECORD for Pennsylvania industry, established by the Berwick plant of American Car and Foundry Company, was recognized by the Commonwealth of Pennsylvania in the presentation of a certificate of honor. The presentation was made at a gala ceremony at the plant on December 14, 1950, by Governor James H. Duff, who is now United States Senator from Pennsylvania.

Berwick's record, which stood at 3,100,000 safe man-hours at the time of the award, began May 19, 1950. The record continued until January 11, 1951, reaching a total of 3,454,070 man-hours.

At the colorful presentation ceremony, the plant was decorated with flags and bunting and a program in keeping with the occasion was arranged. Before 2200 employees Governor Duff presented the elaborate scroll to ACF President C. J. Hardy, Jr., who accepted it on behalf of Berwick workers.

Following the ceremony, an informal dinner was held for Governor Duff and his party. A souvenir program and a mechanical pencil were presented to each employee who attended.

The program at Berwick has

been conducted through a well organized structure of 36 safety committees, one for each department. In the establishment of the record, the Berwick safety organization received much help from Forest H. Humphreys and S. B. Hopping, safety leaders at New York headquarters. Russell N. Crosby, Berwick safety supervisor, M. L. Keyser, personnel director, and Glenn Nelson, of the Berwick supervisory staff, were among the local leaders in the safety accomplishment and in the ceremonies.

Education can't make us all leaders, but it can teach us which leader to follow.

# Include the missing half



and double  
the Scope of your  
Safety Program!



**A PROVED PLAN**

# here is your missing half—

## The off-the of Your



Less than one-half a worker's day is under the control of your job safety program. The "missing half" is spent in traffic, recreation, and around his home.

Nearly 3 out of 5 worker accidents occur during this hazardous time! Your company foots the bill for a large share of loss due to these off-the-job accidents. Today's high production requirements make it even more important that man-hour loss be curbed to a minimum.

The following pages show you how to increase the scope of your safety program to include the other half of your worker's day!

Do it *easily, economically—and effectively.*

It's good, sound business **THAT WILL  
PAY YOU PREMIUMS!**

**...for less than a penny  
can integrate  
half" into your safety**

# **-Job Part Worker's Day!**

## **His Wife and Family are Part of it, too...**

Don't overlook your staunchest safety booster—the worker's wife! She's the most safety-minded person in town where her family is concerned. Show her how to avoid mishaps to her breadwinner and family—and she's on her toes every second!

She'll work for your safety program night and day—with the most loyal cooperation you can get. Include her, too . . . and you'll get complete coverage of the hazardous "missing half."

Turn the page and you'll learn how you can include the entire family in your program—keep them safety-conscious every day in the year! **AND SHOW THEM HOW TO HAVE PLENTY OF FUN—AT THE SAME TIME!**

**a week you  
this important "missing  
program!**



32nd Edition . . Best of them all!



12  
BEAUTIFUL  
FULL COLOR  
SAFETY  
STORIES

January 1952

December

S	M	T	W	T	F	S
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

February

S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

THE HEART  
OF YOUR  
SAFETY  
PROGRAM



# 1952 National Safety Calendar

featuring exclusive  
"Save-A-Life-Line"  
Contests that bring  
the worker's family  
right into your  
safety program!

National Safety Calendars are a gift the whole family will use and enjoy the year 'round! It's a natural—a home study course in safety for workers, their wives and kids. Daily safety-reminders that apply on-the-job or off-the-job. The *one* training aid you can put in their homes—that will work for you a solid year.

And when you figure in the success of the family "Save-A-Life-Line" Contests—you can see what a bang-up job the Calendar does! It's so easy, so simple—and jives right into your own program. Cash prizes for the best lines each month win the whole family over to writing safety limericks . . . they have a lot of fun . . . and think about safety at the same time! See following page for full details.



# Nearly Half a Million Participants Last Year Proved This Plan

NO DRINKING

**\$100<sup>00</sup>**  
**for a**  
**LIFE LINE!**

A Growlman Good, Sparky Haynes,  
May be found watching any big blam.  
So it's really coming.  
With all his blam-quing

REMEMBER—ANOTHER BIG  
CONTEST NEXT MONTH!

ALL SET FOR CHRISTMAS? Floor-  
clay, we mean.  
Then why not go after that big \$100  
cash prize in the "Save-a-Life Line"  
contest? Or one of the 32 other cash  
prizes.

Sit down RIGHT NOW and write a  
last line to the safety linerich at your  
left. Make it rhyme with "Haynes"  
and "blam."

Write your line ON A POSTCARD and  
mail it—ON or AFTER November 1  
small 11—ON to the Calendar Con-  
test, 425 North Michigan

and BEFORE midnight November 30—to the Calendar Con-  
test Editor, National Safety Council, 425 North Michigan  
Ave., Chicago 11, Ill.

For the best line it receives each month, the National  
Safety Council will pay a total of \$325 in cash.  
FIRST PRIZE—\$100. SECOND PRIZE—\$50. THIRD PRIZE  
—\$25. And THIRTY \$5 prizes. Thirty-three cash prizes  
in all!

Anyone can enter this contest—men, women or child—  
except employees of the National Safety Council and their  
families.

For complete rules of this "Save-a-Life Line" Contest, see  
the back of the December page of this calendar. Be sure  
to follow them!

## BE READY FOR EMERGENCIES

TO SAVE property and life—perhaps your own . . .  
BE PREPARED—  
FIRST—TO PREVENT FIRES.  
SECOND—TO DO the RIGHT THINGS in case of fire.

To prevent fires AT WORK:  
• Obey non-smoking rules. Whenever you smoke, be  
sure to extinguish match and cigarette butt.  
• Use safety containers for handling flammable liquids.  
• Don't use flammable liquids near open flames.  
• Put rubbish and oily waste in covered metal cans.  
• Report immediately any electrical defects.  
• Know ALL the plant's fire prevention rules.

And in case it does happen:  
• Know how and where to report the fire.  
• Know the location of fire exits and of fire fighting  
equipment.  
• Know which type of fire extinguisher to use for each  
type of fire.  
• Think fast but keep cool! Follow plant organization.

To prevent fires AT HOME:  
• Be sure matches and cigarettes are extinguished be-  
fore they are discarded. Put lighted cigarettes nowhere  
except in your mouth or in an ash tray!  
• Watch closely for frayed cords, loose connections  
and unusual actions of electric fixtures and appliances.  
• Have repairs done by professionals.  
• Keep furnace, stove, flues and chimney repaired.  
• Keep soot cleaned out during firing season.  
• Insulate any woodwork near furnace, stove or flue.  
• Don't overheat in cold weather.  
• Never use kerosene to start or relight a fire.  
• Train children to respect the proper use of fire.

And in case it does happen:  
• Keep your head to you can think fast and act right.  
• Know how to turn in an alarm—if there is time—and  
be sure to give your address.  
• If it's past the stage of a small blaze you can put out,  
get out with others as fast as possible, and don't linger  
to gather up belongings.

To be prepared for a fire emergency in ANY building:  
Know the nearest regular and emergency exits . . . Take  
no unnecessary risks chances to leave it in a room. You  
may be safer to wait for aid . . . if you must leave through  
heavy smoke, stay close to the floor . . . Keep your head.  
PANIC IS FIRE'S RIGHT HAND!

### THIS MONTH'S PICTURE

Hours this for a fire area of volunteer  
fire fighters! Any blaze that would be  
big enough to blow up in the face of  
such steady opposition would be snuffed  
out without even one healthy candle. And  
the best part of it is that, along with  
hundreds of fire, these volunteers are  
working to make sure no home is ever  
in danger.

**THE ENTIRE  
FAMILY  
TAKES PART**

# "Save-a-Life-Line"

**CASH PRIZE CONTEST**

**EACH MONTH MAKES SAFETY**

**A FAMILY AFFAIR!**

Everyone from Junior to Grandma joins in the fun to win cash prize money each month! They just sit down . . . complete a last line to rhyme with the safety limerick . . . and submit their entries. That's all there is to it . . . easy, simple and effective. Keeps the whole family thinking about safety . . . helping to make your safety program an even bigger success.



**You Receive Complete Tie-in Materials to Promote the  
Calendar Contest in the Plant . . . and at Home**

**POSTERS**

**MATS**

**LETTERS**

**STREAMERS**

**BULLETINS**

**PATTERN ENTRY FORMS**

. . . everything you need to keep the  
contests fresh in your employee's  
minds . . . interesting and successful.



the finest Good Will

Christmas Gift Your Plant Can

Give To Its Employees!



What better way to say "Merry Christmas and Happy New Year" than the big, beautiful, full-color National Safety Calendar?

Here is something your workers and their families will use every day of the year . . . something they need. And along with it . . . you're giving them the opportunity to win cash prizes and have fun the whole family can enjoy! Not the usual Christmas Card of momentary effect—BUT lasting year 'round cheer. It's your opportunity to score in employee relations—and put safety across in a big way, too.

Take advantage of the special discount offer on the next page—send in your reservation, now!



**Act  
Now!**

**5%**  
**DISCOUNT**

**send  
your  
order  
in  
today!**

You will receive a 5% discount on the prices given below, provided imprinting instructions are furnished by June 15, 1951.

## **PRICE SCHEDULE**

(F.O.B. CHICAGO)

Quantity	To MEMBERS		To NON-MEMBERS	
	Packed Flat In Bulk	In Mailing Tubes	Packed Flat In Bulk	In Mailing Tubes
1 to 9.....	55¢ each	58¢ each	65¢ each	68¢ each
10 to 199.....	53¢ each	56¢ each	60¢ each	63¢ each
200 to 999.....	44¢ each	47¢ each	50¢ each	53¢ each
1,000 to 9,999.....	40¢ each	43¢ each	43¢ each	46¢ each
10,000 to 19,999.....	36¢ each	39¢ each	39¢ each	42¢ each
20,000 or more.....	34¢ each	37¢ each	37¢ each	40¢ each

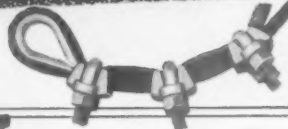
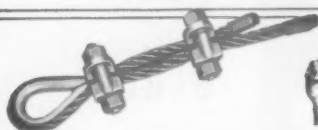
Note:—Orders for 200 or more calendars imprinted without extra charge.  
Imprinting charges on orders for less than 200, \$6.00.

**INCLUDE THE MISSING HALF—DOUBLE  
THE SCOPE OF YOUR SAFETY PROGRAM!**



## Your wire rope stays stronger and lasts longer with **"FIST-GRIP" CLIPS**

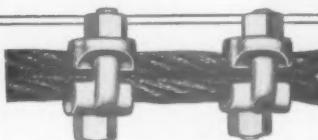
Round U-Bolts crimp wire rope in forcing live rope against saddle.



Laughlin "Fist-Grip" Clips safely secure rope on all 4 sides.



Crimping action of U-bolt leads to early breakage, costly replacement.



"Fist-Grip" Clips with all-around grip keep rope smooth — deliver maximum rope strength.



## You're SURE of these benefits with "FIST-GRIP" CLIPS

**SAVES TIME** — easy to put on with any type wrench.

**SAFER** — four bearing-surfaces do not crush or weaken rope.

**STRONGER** — bolts integral part of saddle. Complete unit drop-forged.

**SAVES MONEY** — costs less per installation in most popular sizes.

**SIMPLER** — can't be put on backwards.

**SURER** — two clips do the work of three U-bolts.

Distributed through mine, mill and oil field supply houses.

**New, Valuable Data-Book Free**

The new Laughlin Data-Book #150 contains a wealth of valuable information as well as a regular listing of the complete Laughlin line of fittings.



THE THOMAS LAUGHLIN CO.  
35 Fore St., Portland 6, Maine

Please send Catalog-Data Book #150 to:

Name.....Position.....  
Company.....  
Street.....  
City.....Zone.....State.....

# LAUGHLIN

THE MOST COMPLETE LINE OF DROP-FORGED WIRE ROPE AND CHAIN FITTINGS



## Sulfuric Acid

(From page 40)

air dryer or water separator in the air line is highly advisable. The air pressure for unloading must not exceed the pressure at which the safety device on the car will blow off, usually 25 pounds per square inch, but sometimes less. It is stenciled on the car, and a reliable safety valve is set to blow at the same pressure in the air supply line. If the unloading pressure cannot be found stenciled on the car, 25 psi may be taken as the average value of unloading pressure.

27. The shutoff valve controlling the compressed air line to unload the car should be located in a place remote and protected from the car so that it cannot be made inaccessible by a leak or spray of acid. There should also be a vent valve at this point so that the air pressure quickly can be dropped to atmospheric in an emergency.

28. If a tank car is received with the acid frozen or even slightly solidified, the shipper should be asked for instructions as to the method of removal before an attempt is made to unload.

29. It is extremely dangerous to leave a small amount of acid in a tank car and then offer it to the railroad for return shipment. The car should be completely unloaded and drained as thoroughly as possible, but no attempt should be made to wash it or to introduce water or other materials except air unless the shipper specifically instructs otherwise and gives his permission. After the unloading has been completed, the four ICC Dangerous placards should be reversed.

## Storage

30. Storage areas should have facilities for drainage and for the washing down of spills with water. Spills of acid should not be discharged into a sewer or washed into a sewer or a river until they have been neutralized. The use of crushed limestone as a foundation under storage areas is considered good practice since it both provides good natural drainage

and neutralizes the spills automatically and rapidly before they are discharged into the sewer.

31. To eliminate the possibility of an explosion, electrical wiring should be in rigid screwed conduits and electrical equipment should be installed in accordance with the National Fire Protection Association Code, Article 500, for Class I, Group B, locations. Chemicals or organic materials with which the acid may react violently should be kept out of the acid storage area. Gravity ventilation should be provided, but forced ventilation should not be necessary.

32. Filled carboys should never be tiered more than three high, preferably two high. It is not necessary to loosen or otherwise handle stoppers on carboys since they do not deteriorate in storage.

33. Drums should be stored with the plugs up. The plugs should be loosened weekly, or more frequently, depending upon the weather, to release the internal pressure created by the evolution of hydrogen.

34. Storage tanks should be equipped with vents of such size as to maintain the tanks at atmospheric pressure. Metal catwalks should be provided for necessary routine inspections on tops of tanks. The tops should not be used for this purpose since they are likely to corrode, particularly near the vents, because of the mist and vapor of weak acid.

35. Heating of storage areas is often necessary because the freezing point of sulfuric acid varies widely according to the type of tank, and many of the commercial grades freeze at common winter temperatures.

#### Personal Protective Equipment

36. The personal protective equipment required for handling sulfuric acid will vary with the possible exposure for the particular job. For work on pipe lines and pumps with considerable hazard of extensive spills, for emergency use, and for periods of time not to exceed 20 minutes, a complete rubber suit and rubber hood, with rubber gauntlet gloves and rubber boots may be used. Since

*An ounce of prevention*

**EAGLE-PICHER  
INDUSTRIAL  
FLOOR DRY No. 85**

*is worth a pound of cure!*



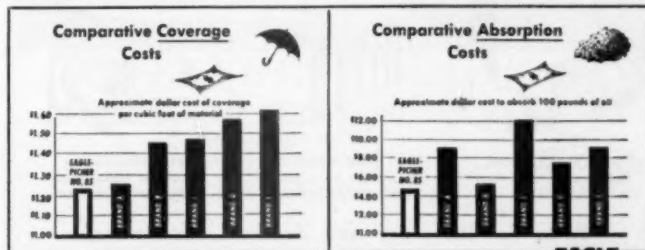
Speed-light Photo by J. H. Brown

### **Eagle-Picher Industrial Floor Dry No. 85... tops for safety, efficiency and economy!**

1. This extremely lightweight, non-combustible, granular mineral compound, sharply reduces the dangers of slipping on wet, oily floors.
2. It retains its granular form even when saturated with liquids because it is chemically inert—insoluble in oil, water or other liquids. Consequently it retains its anti-slip effectiveness for longer periods.
3. It can easily be applied by hand, shovel or by mechanical means. Its light color helps brighten dark work areas, resulting in added safety. Packed in 50-pound, multi-wall Kraft paper bags.

#### Tests prove its performance

Eagle-Picher Industrial Floor Dry No. 85 outperforms five other leading compounds



3084

Write for complete information

**The Eagle-Picher Company**

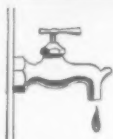
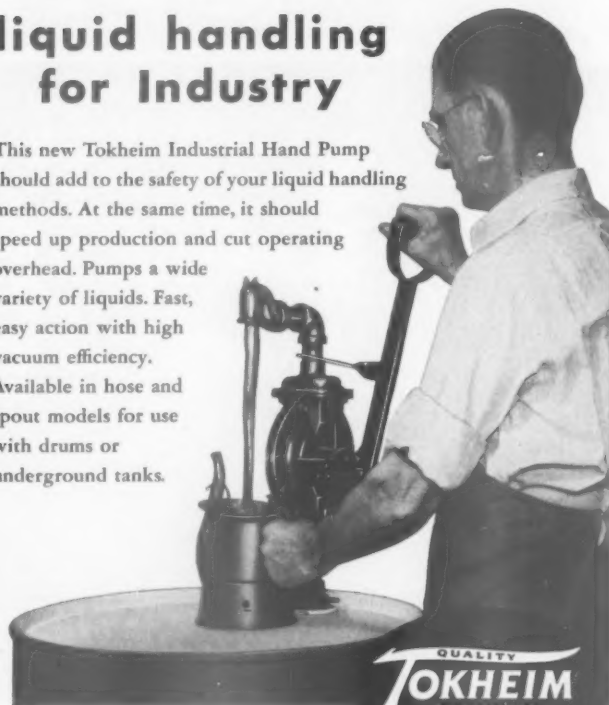
GENERAL OFFICES: CINCINNATI (1), OHIO



# SAFER

## liquid handling for Industry

This new Tokheim Industrial Hand Pump should add to the safety of your liquid handling methods. At the same time, it should speed up production and cut operating overhead. Pumps a wide variety of liquids. Fast, easy action with high vacuum efficiency. Available in hose and spout models for use with drums or underground tanks.



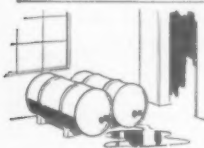
**NO WASTEFUL DRIPPING**  
Special nozzle attachment eliminates dripping.



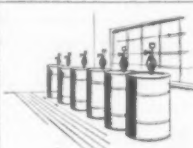
**REDUCE FIRE HAZARD**  
Spilling of liquids is greatly minimized.



Pump is approved for use with petroleum liquids.



**NO SLIPPERY FLOORS**  
Liquids don't reach floor to cause accidents.



**SAVE SPACE**  
Drums may be stored or used in upright position.



**SPEED PRODUCTION**  
Liquids are pumped from drums at any desired speed.

**Write for literature and detailed information.**

General Products Division  
**TOKHEIM OIL TANK AND PUMP COMPANY**  
1670 Wabash Avenue, Fort Wayne 1, Indiana  
Factory Branch: 1309 Howard Street, San Francisco 3, California

there is no ventilation in this type of suit, it must not be used for more than 20 minutes of active work at one time.

37. For normal maintenance and repair work, a permit system should be set up, to make sure that the equipment and lines are in proper condition and that the employees are provided with and wear the proper safety equipment. As full protection for work of this kind, they should have acid type goggles worn under a full length face shield, a brimmed felt hat or fiber hat, rubber safety shoes, a rubber apron, full length rubber coat, and rubber gauntlet gloves. Jobs with less exposure will require less protective equipment.

38. If a tank or closed space must be entered in an emergency, supplied atmosphere respiratory equipment is essential. It may be a self-contained breathing apparatus or an air line mask approved by the United States Bureau of Mines. Rescue harness and life lines, treated to resist the action of sulfuric acid, should also be used.

### Safety Showers

39. Quick acting safety showers are a necessity wherever sulfuric acid is handled and stored. The showers should be inspected at regular intervals to ensure quick operation at all times. They should be thoroughly protected against freezing in cold weather.

40. Eye washing fountains or convenient sources of running tap water at low pressure, so as not to further irritate an injured eye, should be available for eye irrigation.

### First Aid

41. The most important first-aid measure for sulfuric acid burns is the immediate application of a large quantity of running water. Contaminated clothing should be removed under the shower, and water must be applied until all traces of acid have been washed away.

42. For acid in the eye, immediate flushing with a slow stream of water is required. The eyelids should be held apart and the eye irrigated for at least 15 minutes. If a physician is not immediately

available, it is advisable to continue the irrigation for another 15 minutes. In the absence of an eye washing fountain, a small hose connected to an outlet may be used.

43. Acid taken internally will cause severe burns of the mouth, throat, esophagus, and stomach. If the individual is conscious, he should drink large amounts of water or milk.

44. In all cases of accident, the services of a qualified physician should be obtained as soon as possible.

#### BIBLIOGRAPHY

Manual Sheets T-7, T-7A, T-8, SD-20, TC-1, Manufacturing Chemists' Association.

*Clinical Toxicology*, Thienes and Haley, published by Lea and Febiger, 1948, page 141.

*Occupational Disease of the Skin*, Schwartz and Tulipan, Lea and Febiger, 1939, page 105. National Fire Protection Association *Handbook of Fire Protection*, Crosby, Fiske and Forster, 1949, page 393.

Manufacturing Chemists' Association, Interstate Commerce Commission *Regulations and Specifications SA, I-A, for Shipper and Consignees*.

*Medical Chemistry and Toxicology*, Holland, Fifth Edition, W. B. Saunders Company, 1917, page 165.

*Eye Hazards in Industry*, L. Resnick, Columbia University Press, 1941.

#### ACKNOWLEDGMENT

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### Cold War on Accidents

(From page 37)

Around the electrical equipment of an ice plant there is always need for great caution. Recently a news dispatch reported that a worker was electrocuted when he touched the live wires of a crane while making repairs. Signs in bright colors on nearby posts and walls warn the operator to "pull the switch before cleaning, adjusting and repairing the machine." If this employee had heeded such a warning he would be alive today.

The innocent block of ice has

## 37 FALLING ACCIDENTS



EVERY HOUR\*

WILL ONE OF YOUR MEN BE NEXT?

Every hour, falling accidents kill or disable 37 workmen!\*

Are you sure your men are safe from unsafe footing?

You can give your workmen maximum protection against costly slipping and falling accidents with A. W. ALGRIP Abrasive Rolled Steel Floor Plate. ALGRIP is made by rolling tough abrasive grain as an integral part of the upper portion of steel floor plate. Wet or dry ALGRIP gives non-slip protection even on steep inclines. Wear only exposes new abrasive particles so maintenance is not required.

Engineers, architects, purchasing agents, and safety engineers are specifying A. W. ALGRIP for thousands of industrial and commercial applications. Follow their lead. Get more information now. Write for booklet B-13.

THERE'S NEVER A SLIP ON A.W. ALGRIP!

Magnification shows even distribution of abrasive grain in A.W. ALGRIP.



Even on steep inclines A.W. ALGRIP IS NON-SLIP!

## A.W. ALGRIP

ABRASIVE ROLLED STEEL FLOOR PLATE

ALAN WOOD STEEL COMPANY

CONSHOHOCKEN, PA.

125 Years of Iron and Steel Making Experience

Gentlemen:

Please send me your 8-page information-packed booklet B-13.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

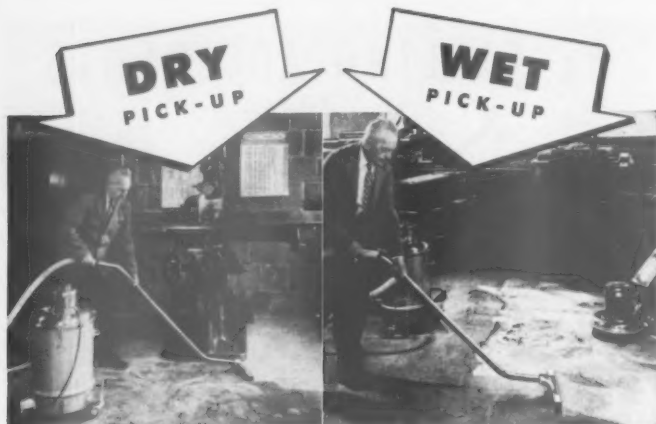
COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

Other Products: PERMACLAD Stainless Clad Steel • A.W. SUPER-DIAMOND Roof Plate  
Plates • Sheets • Strip • Alloy and Special Grades

\*17% of the 222 occupational injuries which occur every hour are due to falls. Source: National Safety Council's 1949 edition of *Accident Facts*.



## HILD Heavy-duty PORTABLE VACUUM IS ALWAYS READY FOR BOTH!

Snap the switch and the HILD Vacuum is ready for any job! No filter to change for wet pick-up...no risk of damaging the machine because a careless or untrained operator has neglected or forgotten the "preliminaries." When used to "sweep floors with air" the Hild Vacuum removes all loose dirt...from cracks and low spots too. No cloud of dust...no sweeping compound needed. When teamed with the Hild Floor Machine for scrubbing floors, the HILD Vacuum just as thoroughly picks up dirty liquids...leaves the floor clean, dry and slip-safe. Floor tool attachments swivel to reach easily under, between and around machines. Other attachments equip the HILD Vacuum for dozens of clean-up jobs in shop or office.



Write for  
**FREE**  
Circular

HILD FLOOR MACHINE CO. • 746 W. Washington Blvd. • Dept. NS-5, Chicago 6, Ill.

### Independent Cooling System protects New HILD "Bi-Pass" Motor against moisture in Vacuum Air-Stream!

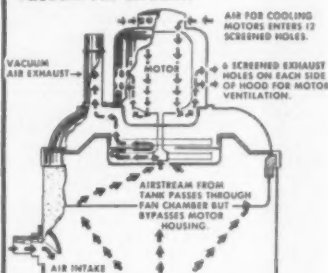


Diagram shows how specially-designed HILD "Bi-Pass" Motor is cooled independently of vacuum air-stream. Thus, the motor cannot be damaged by moisture or dust picked up by vacuum...will not overheat. Ask for free demonstration.

long been a problem to the safety man. A careful employee will handle ice for years without injury, though his job is far different from an automatic operation such as a punch press or a conveyor line. Ice always must be firmly gripped with tongs and in the right place. Upending or lowering the long, slippery, heavy blocks calls for skill and experience in addition to sheer strength. A crack in a cake can cause a frozen missile to strike the worker and a loosened grip of the tongs can result in serious injury. The character of the operation requires that the employee stand on a platform or storage floor, seldom free from a coating of ice or chips, and retain his footing, without the usual benefit of a non slip surface. A rounded edge or a broken corner on the cake can twist it and cause a severe sprain or even a hernia.

Reports of an ice industry study by a well known insurance company show statistically that nearly half of ice accidents occur during the handling of the ice cake itself.

During the summer season an ice house is a scene of great activity. Scorers are sawing a two inch cut into the surface of the ice block for future cutting into smaller pieces of accurate weight. On another machine ice is cubed for restaurants, hotels, taverns and home use. Many blocks are crushed for vegetable and fish cases. Despite guards on these processing machines, occasionally someone is injured on a moving saw. Keeping accidents of this type to a minimum requires constant supervision.

On the delivery platform, blocks are lined up ready for loading and are replaced constantly by other blocks sliding out through the storage chutes. Trucks are backed to the docks and drivers pull the blocks over the tailboard or pile bags of cubes into them. Pick-up trucks are most in evidence. Transport trucks carry ice from plant to stations, and tractor-trailers are used for the long-distance hauling.

The job of a driver-salesman is not easy. His route takes him to many kinds of commercial establishments and private homes. He makes frequent trips into basements and upstairs and lifts ice



## DAV-SON BULLETIN BOARDS

Use DAV-SON Cork Back Bulletin Boards for pinning up notices, letters, photos, etc. Many sizes and styles available for your particular requirements.

Write for Special Circular

We manufacture the famous DAV-SON Changeable Letter Bulletin Boards, Safety Displays, Lobby Directories and Name Plates for every purpose.



**A.C. DAVENPORT & SON, INC.**  
ESTABLISHED 1932  
311 N. DESPLAINES ST., CHICAGO 6, ILL.



into refrigerators and food cases many times during the day.

As the season gets under way drivers are hired. Time is lacking for the thorough screening and training that leads to the best personnel, but it is to the credit of superintendents and route foremen that even under these "quick-hiring" conditions the safety record of ice fleets is fair. The accident frequency rate is higher than that of bakery and dairy fleets, which operate the year around, but is lower than beverage routes.

Considerable ice goes into the bunkers of refrigerator cars to keep fresh the meat and other perishables on their way from the packing house, fields and orchards to the markets of the nation. Little does the family realize, as it enjoys crisp vegetables or juicy fruit, the long distance these shipments have traveled and the care taken along the route to keep them at protective temperatures.

In railroad icing operations, men on platforms handle large blocks of ice from the conveyor chains. These blocks are cut and skidded over boards to the hatchways of refrigerator cars where men on the narrow runways on top of the cars break the blocks into smaller pieces. Snow ice is often blown on top of the cargo to protect green leaf vegetables en route. On team tracks high-lift trucks raise the ice to the bunkers by means of hoists.

The average icing dock is about 1200 feet long and a man at its farther end is very much on his own. This is also true of the worker in a huge storage and the puller in the immense area of the tank room. It is no easy task for superintendents and foremen to keep all employees safety minded.

What has been done to overcome the hazards in this industry and improve the safety factor? Graphic National Safety Council posters are distributed throughout the plants. They show the proper way to lift by using the legs instead of the less sturdy back muscles. Other posters warn against jerking and twisting. Company bulletins explain the safe placement of the feet while the block is being raised or lowered. Pictures and bulletins must be augmented constantly by verbal in-



# WHY NOT THE BEST?

**STASAFE  
HAIRGARDS  
ARE...**

- COOLER!
- MORE COMFORTABLE!
- MORE ATTRACTIVE!
- MORE ECONOMICAL!



Complete listing  
and prices in  
StaSafe Bulletin

**518**  
SEND FOR IT  
NOW!

## Standard Safety Equipment Co.

232 W. Ontario St., Chicago 10, Ill.

NEWARK

LOS ANGELES

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## CAL-FLOR-DRY

Ask your  
jobber  
Salesman,  
or write  
direct.

CAL-flor-dry puts an instant stop to slipping accidents. It absorbs grease and oil out of shoes and clothing—cleans tool handles—helps to prevent dermatitis—makes good housekeeping easy. CAL-flor-dry absorbs 39 1/2% more grease and oil per lb. than the average of eight competing products.

**THERE'S A LOT LEFT  
IN THE BAG, AFTER  
OTHERS ARE EMPTY.**

## The FLOR-DRY Company



2318 WYCLIFF ST.  
ST. PAUL 4, MINN.

## FRANKLIN'S...

THE WAX THAT HAS EVERYTHING!



HIGH GLOSS...WATER RESISTANT...LONG WEARING... *Safe!*

**Safety**  
made **INTERESTING**  
TO YOUR WORKERS WHERE  
ACCIDENTS OCCUR

EVERY EMPLOYEE A  
SAFETY MAN

**YOUR  
Safety News**  
PUBLISHED BY THE NATIONAL SAFETY COUNCIL  
Your Firm Name Printed Here

### HOW SAFE are YOUR EMPLOYEES?

Here is Industrial Safety at a Big Saving in Time and Money. The causes of accidents directed to your employees monthly. Just the way they like it with Color, Humor and Interesting Pictures that impress. How else can workers be taught to know, avoid and report Unsafe Acts & Unsafe

Conditions, that cause your accidents, for so little money.

A CONTINUOUS "SAFETY REMINDER" THAT KEEPS EMPLOYEES ALERT TO SAFETY.

Write for samples and prices

FRANK O. SHOEMAKER, Publisher  
2641 S. IRON ST., CHICAGO 9, ILL.

structions and warnings. The newcomer is not the only one who needs guidance. The old-timer also falls into dangerous habits.

A safety committee is appointed at each plant and plays a most important role. Committee members promote the use of safety shoes; they call attention to the unguarded parts of machines; they ferret out weak railings, unusually slippery spots, loose wires and other plant hazards. On the human side, where 90 per cent of all accidents originate, these guardians of safety caution employees against reckless haste. They teach newcomers how to carry their tongs and pikes so as not to endanger themselves and others, and how to work safely while guiding blocks down the chute from the tank room.

In an organization with many plants and delivery stations the safety department reviews numerous accident reports. In particular cases it points out how efficient supervision, better housekeeping, and safer working methods could have prevented the injury. Placed on neat bulletin boards at strategic points, the National Safety Council posters do an effective job among the ice men. These have the specialized touch of the accident prevention artist and an effective economy of words. The illustrations influence men where words, however forceful, sometimes fail.

A "Safety Flash" sent out after a major accident carries a warning in an effective manner. This is on a telegraph form to which has been added a striking masthead, creating unusual attention when placed on the bulletin board. To stress the need of continuous supervision, a frequent letter for the superintendent and the members of his safety committee carries added weight. In this letter we give a topic of discussion to stimulate interest in the next safety meeting. Inserts, with short punch-line messages of caution, distributed with pay checks, can be helpful.

In spite of all preventive effort, the workers in ice plants have accidents. Constant effort is necessary to correct the human and mechanical failures that cause them. Hence, a company report features in bold type the ques-

tions, "What can be done to prevent a recurrence of this accident?" "What action has been taken?" Witnesses are questioned on the scene. If possible, the injured tells how it happened and the report is written out in the presence of his co-workers. In this way the seriousness of the episode will be impressed on the group and they will not forget soon the lesson the injury has taught.

Safety problems of an ice fleet are only slightly different from those of other delivery systems. There is always plenty of trouble with mechanical defects of trucks, but for the best results we must realize that crankshafts, carburetors or steering gears are not as important as kinks within the human brain. The difference between a safe driver and an unsafe one can account for wrecked equipment, damages to other cars and slowed down deliveries, and a tremendous cost in dollars.

Every season a placard not smaller than 14 x 11 inches is prepared for the driver's attention. It is a useful repetition of the rules that lead to safe driving. The National Safety Council assists greatly with its traffic posters.

Driving bulletins are issued by the company from time to time. "Rear end crashes," "side swiping," "intersection collisions," are some of the topics that are discussed in a constructive manner. They must be brief. Henry Ward Beecher, the great preacher, used to say, "There are no conversions after 20 minutes." And with drivers there is very little reading of safety propaganda past the first 150 words.

In the ice industry, as in other manufacturing fields, a safety program can act as a dam to stop the flow of direct costs such as medical bills, compensation, and liability from truck accidents. Another large expense is the repairs to damaged vehicles.

Many indirect costs arise from accidents—slowed down operations, time out for investigation and reports, inefficiency resulting when key personnel must be replaced, the impaired ability of the plant worker who returns to the job too early. These are some of

# PROTECTS HANDS against oil, paint, grime



## PREVENTS TIME LOSS

### DU PONT PRO-TEK

—a hand cream that  
acts like an invisible  
work glove

#### YOUR WORKERS' HANDS

can be easily protected against paint, grime, and insoluble cutting oils with Du Pont PRO-TEK. This hand protective cream acts like an invisible work glove. Just have your workers rub it on their hands and arms before starting work. It washes off easily when the job is done—and takes all the grime with it.

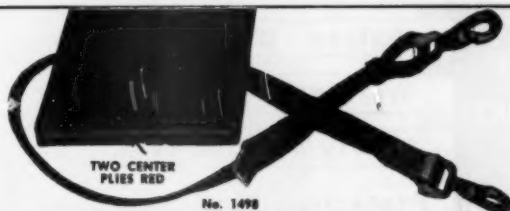
Ask your supplier for Du Pont PRO-TEK. Or write E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Del.



BETTER THINGS FOR BETTER LIVING  
THROUGH CHEMISTRY

## PRO-TEK

HAND PROTECTIVE CREAM



### NEW! BUHRKE NYLON SAFETY STRAP—ULTRA FLEXIBLE

Light weight, SAFE, uniform flexibility—even at -25° F.—strap remains soft and pliable; in 3 styles, No. 1498 with slide buckle, and No. 1499 (above) with tongue buckle. Made of NYLON FABRIC, 1½" wide, 4 ply. Full cross section breaking strength over 3,000 lbs., buckle hole strength over 500 lbs. SAFE to use until RED PLY appears. Complete controlled fabrication of strap in our plant. Write...

R. H. BUHRKE CO., 4701 W. Grand Avenue, Chicago 39, Illinois

Every morning,  
noon and night,  
clean your glasses,  
save your sight!



**BEST FOR EVERYBODY**

**INSTALL THESE SILICONE  
CLEANING STATIONS**

**COMBAT EYE STRAIN •** Conveniently located throughout your office and plant, SIGHT SAVER cleaning stations leave no excuse for eye fatigue caused by dirty, grimy glasses. Silicone treated, SIGHT SAVER tissues clean, polish and protect eyeglasses; give added clarity and a longer lasting luster.

**INCREASE PRODUCTIVITY •** People work more rapidly and more accurately with greater safety and less eye strain when you promote eyeglass cleanliness.

**THIS SAFETY MEASURE AND  
MORALE BUILDER PAYS FOR  
ITSELF! •** SIGHT SAVERS reduce the time required to keep glasses clean; wipe away the best excuse men give for not wearing safety glasses; increase accuracy; decrease eye fatigue.

**SIGHT SAVERS**  
FOR CORNING SILICONE TREATED TISSUES

Save Your  
Sight!

KEEP YOUR  
GLASSES CLEAN

**NO MUSS • NO FUSS • NO FLUID**

Attractive all-metal SIGHT SAVER cleaning stations are easy to install . . . easy to service. Simply unlock and insert refill packet of SIGHT SAVER tissues about once a month. Fool-proof, permanently lubricated mechanism dispenses one 3" x 7" tissue at a time; each tissue exactly the right size; each tissue scientifically treated by Dow Corning, the world's first and largest producer of SILICONES and silicone treated tissues.

Sight Saver Cleaning Stations Available from Safety Supply Houses in All Principal Cities

Made by

**DOW CORNING CORPORATION**  
MIDLAND MICHIGAN

**SAFETY  
PRODUCTS  
for  
INDUSTRY**



**Safety Goggles**

**Welding Helmets**

**Safety Spectacles**

**Protective Clothing**

Write for NEW Catalog •

**GLENDALE OPTICAL CO., Inc.**

232 Liberty Ave.

**AT THE SHOW:**  
See Ben W. Schwartz



Brooklyn 7, N. Y.

the items that divert profit dollars into the expense column.

The safety man can help to correct the wrong procedures and attitudes that end up in accidents and to create the impulse to work with caution. In any plant where there is "safety mindedness," there exists a spirit of well-being and efficiency. Most industries consider accident prevention a part of good management.

## ACCIDENT BAROMETER

Prepared by the Statistical  
Division,  
National Safety Council

**T**HE trend of accidental deaths in January was upward compared to 1950. The fatality toll was approximately 7,600, or 6 per cent more than the total of 7,200 for January a year ago. Most of the increase was in motor-vehicle deaths, but deaths from home accidents also increased. The only reduction occurred in public non-motor-vehicle deaths. Deaths from occupational accidents numbered about the same as last year.

### Motor-Vehicle Deaths

The motor-vehicle death total was approximately 2,890, or 17 per cent more than the comparable total of 2,470 for January last year. Compared to 1949, it was an increase of 23 per cent.

Of the 45 states reporting, 11 had fewer deaths than last year, 3 had the same number and 31 had more deaths. The January death rate per 100,000,000 vehicle miles was 7.9, an increase of 5 per cent over the January, 1950, rate of 7.5.

Cities with populations over 10,000 reported an increase of 5 per cent over January, 1950. Of the 393 cities reporting, 92 showed decreases, 218 had no change, and 83 reported increases.

Regional changes from 1950 in the January death totals were:

North Atlantic	+ 6%
South Atlantic	+13%
North Central	+14%
South Central	+19%
Mountain	+21%
Pacific	+50%

### Occupational Accidents

There were about 1,400 deaths from occupational accidents in January, no change from January a year ago.

The average frequency rate (disabling injuries per million man-hours) in seven sectional contests conducted by the National Safety Council was 6.91, a 7 per cent reduction from the January, 1950, rate of 7.42. However, in the inter-plant contests of community safety councils the January rate was 8.12, a 5 per cent increase from last year. In these contests the severity rate (days lost per thousand man-hours) was 0.21. This was a 38 per cent decrease from January, 1950.

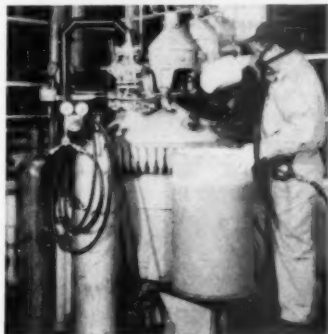
### Public Deaths

The January death total for public non-motor-vehicle accidents was 800, a reduction of 11 per cent from last year's January total of 900. Sizeable decreases were reported in fatal drownings, falls and burns and a small decrease in deaths from firearms accidents. A moderate increase occurred in deaths from transportation accidents and a small increase in unclassified public accidents. Most of the reduction occurred among persons 25 to 44 years of age, but deaths of children under 5 years and persons 65 years and over also decreased. There were substantial increases in deaths of children 5 to 14 years and young people 15 to 24 years of age. Deaths of persons 45 to 64 years old showed little change from last year.

### Home Deaths

The home accident death toll for January was 2,700, or 4 per cent more than for January last year. Increases in deaths from poisonings, burns and mechanical suffocation were partially offset by similar decreases in deaths from falls and unclassified home accidents. Firearms accident fatalities numbered about the same as last year. Most of the increase occurred among persons 25 to 44 years old, but deaths of children under 15 years also increased. Moderate reductions were reported in deaths in the age groups 15 to 24 years and 45 years and over.

## HOFFMAN-LA ROCHE REPORTS "A Wonderful Job" BEING DONE BY *Scott* RESPIRATORS



HOFFMAN-LA ROCHE, INC. of Nutley, N. J.—manufacturers of chemicals and pharmaceuticals—have several points in their processing where exposure to chemical fumes creates a breathing hazard. They report highly successful results with their use of Scott Demand Respirators. Over thirty Scott units are now protecting their employees against organic vapors and acid gases at these points.

For example, left: This man is required to handle toxic solvents, volatile acids and irritating dusty powders in a small area. Scott Respirator supplies needed protection during frequent short exposures.



The next picture shows kettle washing with stream of chloroform. Scott Respirator protects the workman from toxic fumes.



Says the company: "We can assure you that the Scott units are doing a wonderful job, and we can highly recommend their use in other plants."

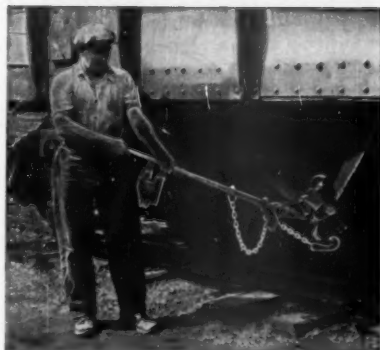
Take advantage of the time-saving, money-saving benefits Scott Demand Respirators can bring to your plant. See your safety equipment distributor about Scott Demand Respirators—today.



### SAFETY EQUIPMENT DIVISION SCOTT AVIATION CORP.

211 ERIE ST., LANCASTER, N. Y.

CANADA: SAFETY SUPPLY CO. BRANCHES IN ALL PRINCIPAL CITIES  
EXPORT: SOUTHERN OXYGEN CO., 157 Chambers St., New York 7, N. Y.



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There's a right way and a wrong way to close hopper bottom car doors with latch-type locks. Dangerous old-fashioned hand, foot and bar methods frequently result in ruptures, strained backs and smashed fingers.

It's your responsibility to prevent those and other serious injuries by the modern method—the use of Trumbull Safety Tools. They also save time and make the job easier. Write today for free folder.

**The Trumbull Mfg. Co.**  
WARREN, OHIO



## Safety Leaders

—From page 46

### Group C

West Virginia Pulp and Paper Co., Williamsburg, Pa.

### Group D

Certain-teed Products Corp., York, Pa.

Certain-teed Products Corp., Savannah, Ga.

Certain-teed Products Corp., E. St. Louis, Ill.

Certain-teed Products Corp., Mar-seilles, Ill.

The Philip Carey Co. Limited, Lennoxville, Quebec.

United States Gypsum Co., Oakmont, Pa.

Lloyd A. Fry Roofing Co., Brookville, Ind.

Armstrong Cork Co., Pensacola Plant.

National Gypsum Co., Kalamazoo, Mich.

United States Gypsum Co., North Kansas City, Mo.

American Writing Paper Corp., Nonotuck Div.

American Writing Paper Corp., Mt. Tom Div.

Nashville Division, The Mead Corp., Nashville, Tenn.

Johns-Manville Corp., Tilton Plant.

Kimberly-Clark Corp. of Canada, Ltd., Kapuskasing, Ont.

Spaulding Fibre Co., Inc., Hayes Plant.

### DIVISION II

#### Group A

Stone Container Corp., Chicago.

#### Group B

Canadian Cellucotton Products Company, Ltd. Niagara Falls, Ont.

The Hankins Container Co., Union Plant.

#### Group C

Atlas Mill, Kimberly-Clark Corporation, Appleton, Wis.

Bird & Son, Inc., Chicago Roofing Plant.

Container Corp. of America, Greensboro, N. C.

St. Regis Paper Co., Nazareth Bag Plant.

Lily-Tulip Cup Corp., Galva, Ill.

Lily-Tulip Cup Corp., Chicago, Ill.

Lily-Tulip Cup Corp., French Lick, Ind.

Certain-teed Products Corp., Dallas, Tex.

Pillsbury Mills, Inc., Wellsburg, W. Va.

Container Corporation of America, Sixth Street Plant.

Thilmany Pulp & Paper Co., Bag Mill.

St. Regis Paper Co. (Canada) Ltd., Dryden, Ont.

Bay West Paper Co., Green Bay, Wis.



# Reduces dermatitis

## A NEW METHOD OF CONTROL

simple, inexpensive . . . it is in the soap

NOW the soap in your washrooms can aid in the cure and prevention of industrial dermatitis. Amazing new Hexachlorophene germicide — powerful enough to kill more than 90% of the germs of the skin — has been added to Powdered Germa-Medica Hand Soap. Hexachlorophene's effectiveness and mildness has been proved in the hospitals for surgical and nursery use. Write today for test results and a sample of Powdered Germa-Medica with Hexachlorophene. Test it under your own conditions. It will mean real savings by preventing absenteeism and dermatitis.

POWDERED  
**Germa-Medica®**

Hand soap with  
Hexachlorophene



HUNTINGTON LABORATORIES, INC.

Huntington, Indiana  
Toronto, Canada

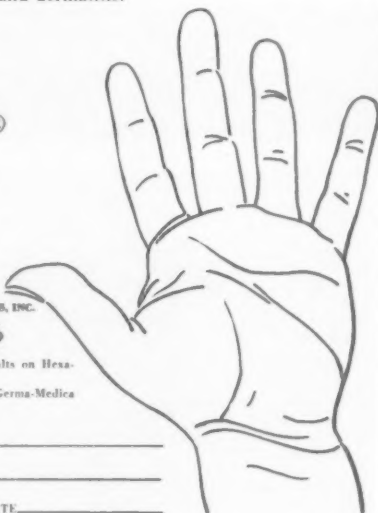
☐ Yes, please send test results on Hexachlorophene Soap.

☐ Send sample of Powdered Germa-Medica with Hexachlorophene.

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CITY \_\_\_\_\_ STATE \_\_\_\_\_



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ANSWER YOUR PLANT  
SMOKING PROBLEMS



Unit No. 2 for mounting on walls, columns and posts.

Unit No. 1, (not illustrated) same as unit No. 2 but with upright and base for use on floors, aisles, etc.

Send for illustrated folder which gives complete details.

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DEPT. C

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Peoria, Illinois

Lloyd A. Fry Roofing Co., San Leandro, Calif.

Lloyd A. Fry Roofing Co., Minneapolis, Minn.

## PETROLEUM

MANUFACTURING—ENTIRE COMPANY

### Group A

Humble Oil & Refining Co., Houston, Texas.

### Group B

The Carter Oil Co., Billings, Mont. MANUFACTURING—INDIVIDUAL PLANT

### Group A

Socony-Vacuum Oil Co., Inc., Paulsboro Refinery.

### Group B

Standard Oil Co. (Ind.), Sugar Creek Refinery.

### Group C

Phillips Oil Co., Sweeny, Refinery. WHOLESALE MARKETING DEPARTMENT

### Group A

General Petroleum Corp., Los Angeles, Calif.

### Group B

The Carter Oil Co., Marketing Dept., Denver, Colo.

RETAIL MARKETING DEPARTMENT

The Ohio Oil Co., Findlay, Ohio.

DRILLING DEPARTMENT

Gulf Oil Corp., Houston, Tex.

PRODUCING DEPARTMENT

### Group A

The Atlantic Refining Company, Dallas, Texas.

### Group B

Mid-Continent Petroleum Corporation, Tulsa, Okla.

NATURAL GASOLINE DEPARTMENT

### Group A

Humble Oil & Refining Co., Houston, Tex.

### Group B

Gulf Companies, Houston, Tex.

OIL AND GAS PIPE LINE DEPARTMENT

### Group A

Shell Pipe Line Corp., Houston, Tex.

### Group B

Mid-Continent Pipe Line Co., Tulsa, Okla.

EXPLORATION DEPARTMENT  
Cities Service Oil Co. (Del.), Bartlesville, Okla.

RESEARCH AND DEVELOPMENT DEPARTMENT  
Phillips Petroleum Co., Bartlesville, Okla.

PRINTING AND PUBLISHING  
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**WILDER**  
**ADJUSTABLE**  
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**FOR *Safety***  
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**IN SOLDERING**

AVAILABLE WITH WIPING PAD AS SHOWN ABOVE OR WITH BRACKET FOR BENCH AND SHELF MOUNTING  
FOR COMPLETE INFORMATION WRITE  
**WILDER MFG. CO., INC.**  
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... no more ridiculous than scrubbing and maintaining floors with old-fashioned soap and water methods and materials.

Hillyard modern floor care methods save up to 50% in labor costs. Hillyard products are tailor-made for particular jobs to enhance the beauty and prolong the life of any floor ... every product is quick acting, safe and easy to use and safe underfoot. U/L approved SUPER SHINE-ALL for instance, is specifically designed as an all-purpose, neutral chemical cleaner to do a thorough job WITHOUT RINSING, in half the time. SUPER HIL-TONE, Hillyard's non-greasy dressing, formulated to hold down dust, eliminates frequent dusting, speeds maintenance of floors, woodwork, furniture.

Users of specialized Hillyard products get the BEST in modern building surface care because Hillyard products are laboratory and field tested! That's why architects, flooring manufacturers, building managers, flooring contractors and maintenance men PREFER to endorse Hillyard SPECIALIZED floor treatment products and equipment for practical care of floors in hospitals, schools, gymnasiums, factories, public and private buildings.

Want to learn how Hillyard can simplify your floor care? Just mail the coupon. No obligation.

Consult the Hillyard trained floor expert in your vicinity "The Hillyard Maintainer"

**... On Your Staff Not Your Payroll**

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**St. Joseph, Missouri**

BRANCHES AND WAREHOUSE STOCKS IN PRINCIPAL CITIES

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Will you please send us information on proper materials recommended for cleaning and treating the following types of floors. No obligation.

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ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

**Group B**  
Central Vermont Public Service Corp., Rutland, Vt.  
**Group C**  
Green Mountain Power Corp., Montpelier, Vt.  
Suburban Gas & Electric Co., Revere, Mass.  
Wachusett Electric Co., Leominster, Mass.  
Beverly Gas & Electric Co., Beverly, Mass.  
Athol Gas and Electric Co., Athol, Mass.

#### GAS DIVISION

**Group A**  
The Columbia Gas System, Inc., Columbus Group.  
**Group B**  
Colorado Interstate Gas Co., Colorado Springs, Colo.  
**Group C**  
Northampton Gas Light Co., Northampton, Mass.  
**ELECTRIC DIVISION**  
**Group A**  
Alabama Power Co., Birmingham, Ala.

**Group B**  
Kentucky & West Virginia Power Co., Ashland, Ky.  
**Group C**  
Northampton Electric Lighting Co., Northampton, Mass.  
Mississippi Valley Public Service Co., Winona, Minn.  
Weymouth Light and Power Co., East Weymouth, Mass.  
Attleboro Steam and Electric Co., Attleboro, Mass.  
Gardner Electric Light Co., Gardner, Mass.  
Southern Berkshire Power & Electric Co., Great Barrington, Mass.  
Citizens Electric Corp., Ste. Genevieve, Mo.  
Farmers' Electric Cooperative, Inc., Chillicothe, Mo.  
Amesbury Electric Light Co., Amesbury, Mass.

#### RUBBER

##### DIVISION I

Firestone Tire & Rubber Co. of California, Los Angeles, Calif.

##### DIVISION II

Dominion Rubber Co., Ltd., St. Jerome Factory.

##### DIVISION III

Electric Hose & Rubber Co., Wilmington, Del.

##### DIVISION IV

United States Rubber Co., Milan Plant.

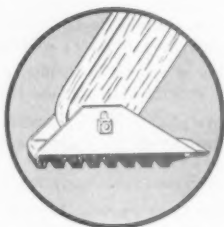
United States Rubber Reclaiming Co., Inc., Buffalo, New York.

# 4 REASONS WHY

## Safe-Hi Ladder shoes are safe on any type of surface



- Cord in the tread holds on wet, oily or soapy floors where rubber alone would slip.
- Rubber in the tread holds on dry floors, cord alone would slip.
- Straight ridges across the line of slippage cut through any slippery substance...grip the surface.
- Self-sharpening spike holds firmly on snow or ice.



**To prevent ladder slipping accidents specify SAFE-HI LADDER SHOES**

See your safety dealer or write

**SPECIFY**

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**PRODUCTS**

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• SAFETY BELTS • LADDER SHOES  
• POLE GRIPS • WALL GRIPS • CHISEL GRIPS  
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## Dirt CAN'T Stand Up Against Steam Cleaning

**N**O doubt about it! When you attack grime with the Oakite Steam-Detergent Gun . . . grime has to go.

The Oakite Steam-Detergent Gun gives you a powerful dirt-blasting combination of heat, pressure and detergent-saturated steam solution.

Use it to clean those hard-to-get-at dirty areas on heavy equipment. Use it to clean walls, floors, ceilings. Use it to strip paint.

Complete details on this low-cost, modern cleaning method—yours for the asking. Send for descriptive folder F 7338 to address below. No obligation!

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SPECIALIZED INDUSTRIAL CLEANING  
MATERIALS • METHODS • SERVICE

The B. F. Goodrich Chemical Co.,  
Port Neches, Tex.

Van Cleef Bros., Inc., Chicago.

#### DIVISION V

The General Tire and Rubber Co.,  
Baytown Plant, Baytown, Tex.

The Firestone Plastics Co., Plastics  
Production, Pottstown, Pa.

The Firestone Tire & Rubber Co.,  
Akron Synthetic Plant.

University of Akron Government  
Laboratories, Akron, Ohio.

United States Rubber Co., Manches-  
ter Plant.

B. F. Goodrich, Du Bois Plant.

The Firestone Tire & Rubber Co.,  
Research Laboratory.

The Firestone Tire & Rubber Co.,  
Memphis Xylon Plant.

National Automotive Fibres, Inc.,  
Trenton Div.

Toronto Plant of The Flintkote Co.  
of Canada Limited, New Toronto, Ont.

United States Rubber Co., Burlington  
Footwear Plant.

The Goodyear Tire & Rubber Co.,  
Niagara Falls, N. Y.

United States Rubber Co., Fabric  
Fire Hose Co.

The Firestone Tire & Rubber Co.,  
Akron Retread Shop.

Roth Rubber Co., Cicero, Illinois.

#### TANNING AND LEATHER

##### DIVISION I

Armour Leather Co., Noven Tannery,  
Chicago.

Keystone Tanning & Glue Co., Damas-  
cus Tannery.

Keystone Tanning & Glue Co., Paw-  
Paw Tannery.

Keystone Tanning & Glue Co., Iron  
Gate Tannery.

#### DIVISION II

Allied Kid Co., Shearling Div., Wil-  
mington, Del.

Keystone Tanning & Glue Co., Cut  
Sole Plant Div.

#### DIVISION III

Group A  
General Shoe Corp., McMinnville,  
Tenn.

General Shoe Corp., Cowan, Tenn.

General Shoe Corp., Frankfort, Ky.

General Shoe Corp., Lawrenceville,  
Ga.

Group B  
General Shoe Corporation, Hoken-  
wald, Tenn.

General Shoe Corporation, Atlanta,  
Ga.

General Shoe Corp., West Nashville  
Plant.

General Shoe Corp., Danville, Ky.

General Shoe Corp., Carrollton, Ga.

General Shoe Corp., Sole Casing Div.,  
Nashville, Tenn.

Jackson Gas Welding Headrest Goggles W-50 ▶



## 8 oz. of Prevention

First, in making these goggles, came *Safety*: pro-  
tection against injurious light rays from front and  
sides . . . and against flying particles; easy adjust-  
ment for proper fit, in goggles and in headrest.

Comfort came next. Properly adjusted, they bear  
gently against the face. Weight is evenly distributed  
about the head. One hand, a few seconds, and they  
are raised or lowered. Lightness too makes for com-  
fort. At eight ounces, these headrest goggles are  
the lightest of their kind on the market.

For Gas Welding, Cutting and Brazing, with lenses in F.S. shades  
3 thru 6; types W-50, LTB-50 and BX with headrest, type  
WR-50 with elastic band.

For Chipping and Grinding, with clear, hardened lenses: type  
G-50 with headrest, type GR-50 with elastic band.

For Flash Welding and Metal Pouring, with visors in light,  
medium and dark green, .020" thick, 4", 6", and 8" deep: type  
J-1 shield with headrest, type C shield with elastic band in back.

For Resistance Welding, Metal Finishing, Woodworking, etc.,  
with visors of clear plastic .020", .030", and .040" thick, 4", 6",  
and 8" deep: type J-1 shield with headrest, type C shield with  
elastic band in back.

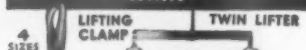
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**Group A**  
Forstmann Woolen Co., Passaic, New Jersey.

**Group B**  
Union Bleachery, Greenville, South Carolina.

**Group C**  
The Clark Thread Company, Thomasville, Georgia.

## DIVISION II

**Group A**  
Forstmann Woolen Co. Weaving Mills, Passaic, New Jersey.

**Group B**  
The Graniteville Co. Enterprise Div., Augusta, Ga.

**Group C**  
Ehrd Manufacturing Co., Plant No. 5, Albemarle, N. C.

# TRANSIT

## DIVISION I

The Dixie Traction Co., Covington, Ky.

## DIVISION II

The Cincinnati, Newport & Covington Railway Co., Covington, Ky.

# Elected Honorary Member of ITE

THE INSTITUTE OF TRAFFIC ENGINEERS has unanimously elected Julien H. Harvey, pioneer traffic

safety specialist and manager of the accident prevention department of the Association of Casualty and Surety Companies, an honorary member for his outstanding contributions to the profession of traffic engineering.

Four other living Americans have been similarly honored by the Institute. Present living honorary members are Paul G. Hoffman, president, Ford Foundation; Thomas H. MacDonald, Commissioner, U. S. Bureau of Roads; Charles J. Tilden, professor emeritus, Yale University, and Andrey A. Potter, dean, School of Engineering, Purdue University. Honorary members are limited to 10 by the Institute's constitution and by-laws.

In 1918, Mr. Harvey conducted the nation's first complete community safety program in Rochester, N. Y. He was with National Safety Council for several years in charge of organization and promotional work among local councils. In 1936 he became executive vice-president of the Greater New York Safety Council.

# The commonsense way to CLEAR AND PREVENT ATHLETE'S FOOT

*In Shower Rooms*

**SAFE, NON-POISONOUS SKIN TOUGHENING  
TO COUNTERACT THE SOFTENING  
EFFECTS OF WEARING SHOES**

**NEAT, CLEAN  
ODORLESS,  
PLEASANT TO USE**



**BATHERS LIKE ONOX  
IT MAKES THE FEET FEEL FINE**

Recent research has upset former theories regarding the control of Athlete's Foot. ONOX is revolutionary. A safe, non-poisonous skin toughener does the work. You may test it under any conditions you choose to impose and without obligation. For example:

- We will ship prepaid, your trial order for any amount of ONOX and equipment. Use it for 60 days. If at the end of that time ONOX has not proved itself to your complete satisfaction you owe us nothing.

We would like to send you the simple details of the ONOX method now used by hundreds of institutions—coast to coast.

ONOX, INC., DEPT. L, 121 SECOND STREET, SAN FRANCISCO 5, CALIF.  
WAREHOUSES: BROOKLYN, CLEVELAND, NEW ORLEANS, LOS ANGELES

**Important:** Did you note the "Radical reversal of medical teaching" in TIME Magazine? A report based on 10 years observation by 91 U. S. Skin Specialists calls Foot Baths "Futile"—"Illogical"—"Potentially harmful." Onox on the other hand is a safe, non-poisonous skin toughener. IT STEPS UP RESISTANCE... INSTEAD OF BREAKING IT DOWN! Try the Onox way. You'll be surprised!

(Copy of TIME article sent on request.)



*For  
Safety*  
**Guard-Ann  
Hat**

Combines utmost protection and style. Exclusive patented features found in no other hat.

**Write for Free Sample  
or Order Direct from us**

**\$15.00 dz.**

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630 HIGH STREET  
BUFFALO 11, N. Y.



## Electrical Equipment For Hazardous Spots

Continued safety of installations of electrical equipment for use in Class I and II hazardous locations,\* as defined by the National Electrical Code, will depend upon proper maintenance.

Maintenance of electrical equipment should be conducted by personnel familiar with the function and purpose of the equipment, and the hazards involved. Some important features of maintenance having general application to electrical equipment for use in hazardous locations are discussed below, and, in addition, it is also essential to adhere to the advice of manufacturers with respect to

\* See Underwriters' Laboratories, Inc.'s Data Cards E 32, UL27a and UL27b, *Electrical Equipment for Use in Hazardous Locations*.

† See Underwriters' Laboratories, Inc.'s Data Card E 32, UL116, *Explosion-Proof Equipment—Effect of Grease on Joints*.

maintenance or servicing specific equipment.

**Disconnect equipment from supply lines:** Electrical equipment should be disconnected from the supplying circuits before disassembling, including partial disassembling of lighting fixtures or units for relamping, and should be tightly reassembled before connecting circuits.

**Machined metal surfaces and holding bolts:** Machined metal surfaces forming joints in casings

or housings of electrical equipment should be protected from mechanical injury and kept clean. In disassembling or assembling the equipment, hammers or prying tools should not be used where they come in contact with the machined surfaces of joints.

Before assembling, remove all old grease, dirt, paint or other foreign material on surfaces forming joints. A thin coating of new grease of a type recommended by the manufacturer of the equipment

## PROTECT EMPLOYEES

*against*

## UNNECESSARY HEAD INJURY



Here, at last, is a light weight, plastic safety helmet, resistant to 3,000 volts of electricity, and by actual test, able to sustain 80 foot pounds under ball impact. What's more, the Paramount safety helmet is light as a feather—comfortable, water-proof, adjustable to head sizes (6½ to 8), and with enough clearance space between head and helmet crown to cushion and absorb intense impact. Genuine leather suspension band has long life and stands up under years of use.

### For Use in Mines

A miner's lamp bracket, adaptable to every type of lamp, can be furnished either on helmet or cap. Being entirely a non-conductor of electricity, this is the safest miner's helmet available.

### Winter Lining

For increased warmth, a two piece lining with a flannelette facing is provided. The lining is sanforized, warm, and is made in a full range of head sizes.

As the producers of millions of M1 Army helmet liners, the famous Cairns-Paramount Firemen's helmet, the Army, Navy and Civilian Air Corps crash helmet for jet pilots and other air corps personnel, the Army Quartermaster Tank Corps helmet, we are specialists in this field and offer you greater protection with lighter weight.

The Paramount helmet and cap are produced under one or more of these patents—No. 2-420-522, No. 2-423-076, and other patents are pending.



## ACME...the only Gas Mask with the "PICTURE WINDOWS"

You never have that "jammed-in" feeling, wearing the Acme Full-Vision Gas Mask. Its patented, larger lenses are like picture windows, giving you full natural vision for that safe, unconfined feeling. When you walk, you can actually see your toes without bobbing your head. This factor alone makes Acme outstanding among gas masks... well worth looking into.

Write for the complete story on Acme Gas Masks for all occupational hazards.

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EQUIPMENT COMPANY**  
2037 West Lake Street, Chicago 12, Illinois

ORDER THRU YOUR DEALER OR, WRITE DIRECT TO

## PARAMOUNT RUBBER COMPANY

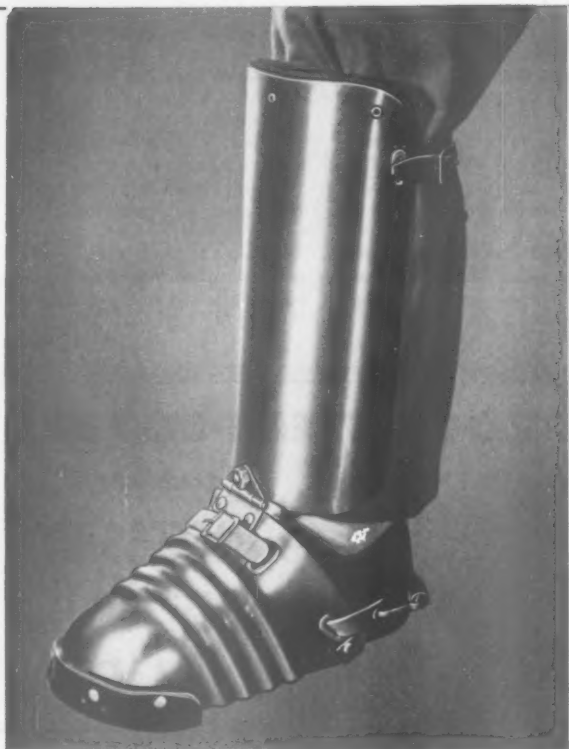
Synthetic Rubber & Plastic Engineers & Mfrs.

10401 Northlawn Avenue

HOgarth 3050

Detroit 4, Michigan

In Canada: The Safety Supply Co., Toronto, Ontario  
In Mexico: Cia. Importadora Mexicana, S. A., Versailles 113, Mexico D. F., Mexico



#### "SANKEY" COMBINATION SHIN-FOOT GUARD

This guard provides protection for TOE, FOOT, INSTEP, and SHIN. It is constructed of aluminum alloy, weighs 34 oz. each, has an overall height of 15 in. from the floor. These guards are being used by edg operators, cattle herders and shacklers, pneumatic tool operators and handlers of piled scrap, steel, pigs, billets, etc.

#### Right — IMPROVED FOOT GUARD

For additional information about "SANKEY" Foot, Toe and Leg Protective Guards please write the ELLWOOD SAFETY APPLIANCE CO., 219 Sixth St., Ellwood City, Pa.

**ELLWOOD SAFETY  
APPLIANCE CO.**



should be applied to joint surfaces,† particularly in the case of threaded joints between aluminum sections.

Holding bolts of enclosing cases, and threaded parts, must be screwed tight.

*Do not make additional openings:* Safety of use in hazardous locations will be endangered should openings or other alterations be made in the devices. Rotating shafts should turn freely, but clearances at shaft openings should never be increased to accomplish this. Manufacturers' advices with respect to lubrication and other servicing of bearings should be followed.

*Overload protection:* Protection against explosions in hazardous locations requires that all electrical equipment exposed to the hazardous atmospheres be of a type suitable and safe for installations in such locations. Equipment should be installed in circuits with overload and short-circuit protection for established ratings. When



#### WITH THIS NEW **ELECTRO-LOCK SAFETY SHIELD**

Another Junkin device that actually ENFORCES safety, because grinder can't operate until shield is in position. Write today for our new booklet which gives full details of this latest protection against the dangers of grinder operation.



**JUNKIN SAFETY APPLIANCE CO., INC.**  
930 W. HILL ST. LOUISVILLE, KENTUCKY

SINCE 1863  
TANNERS OF  
QUALITY LEATHERS

**LICHTMAN**  
J.L.&S.  
**LEATHERS**  
NEWARK, N.J.

Reg. U.S. Pat. Office  
J. LICHTMAN & SONS  
NEWARK 5, N. J.

**For Best Results  
INSIST ON  
LICHTMAN  
Heat Resistant  
LEATHER  
For Protective Clothing**

these protective devices open the circuits, investigations should be made to determine the cause, and the circuits should not be restored until the electrical fault or other defect is corrected.

**Portable equipment:** Portable equipment should be used only where necessary, inasmuch as electrical connections to such equipment by means of the best available type of extra hard-usage, rubber-covered, flexible cord present a less safe construction than devices connected to supply lines using threaded, rigid conduit.

The flexible cord connecting to portable equipment should be inspected frequently and replaced when necessary. Terminal connections to the cord must be made and maintained properly. Safe use also depends on the maintenance of insulation at current-carrying parts of the plug and receptacle. These devices should, therefore, not be used where the insulation may be impaired by moisture, dirt, or other foreign material.

**Good housekeeping:** Good housekeeping contributes greatly to the safe and efficient operation. Inasmuch as it is not good practice to allow combustible dust to accumulate on equipment or in buildings, electrical equipment should be kept clean, particularly when installed in Class II hazardous locations.

In painting the exterior of casings or housings, care should be taken not to obscure the name

plate or any cautionary or informative statements on the enclosure. Electrical equipment for hazardous locations is intended for use indoors where severe corrosive conditions are not likely to be present.

It's always fair weather when good fellows get together — the storms don't come until they get back home.

## OIL-SPUNJ

*makes floors*

★ Safe to Walk on!

★ Safe to Work on!



Sprinkled on the floor of a plant, warehouse, shop or garage. Oil-Spunj protects against slipping accidents and flash fires.

Simply sprinkle it on  
... rub with broom  
... sweep it off.

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### CANFIELD OIL COMPANY

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Memphis, Tenn., Chicago, Ill.



FACTS &  
FIGURES  
No. 12

## JOMAC GLOVES

last 8 times as long as ordinary gloves  
in extensive tests with sheared steel

One of the country's largest electrical manufacturers\* conducted extensive tests on Jomac Work Gloves and a different glove in a steel-shearing operation. The ordinary gloves wore out in six hours. The Jomac Gloves were still good after six 8-hour days.

\* Name on request.

### JOMACS ARE

Washable • Reversible • Flexible • Heat-resistant  
Protect against heat, cold, rough and sharp edges

## C. WALKER JONES CO.

6135 N. LAMBERT STREET • PHILADELPHIA 38, PA.

## the SAF-I-SHIELD SAFETY GOGGLE



*often copied...  
never excelled*

- Comfortable
- Strong—Rugged
- Fits Over Personal Glasses
- Made of Optilite
- Optically Correct
- Low Cost

WRITE FOR LITERATURE AND PRICES

**UNITED STATES SAFETY SERVICE CO.**

KANSAS CITY 6, MO. • BRANCHES IN PRINCIPAL INDUSTRIAL CITIES

In Canada—PARMELEE LTD.—Toronto

## Revise Code for Open Tanks

TO PROTECT WORKMEN from escaping gas, vapor, or mist involved in open-surface tank operations, a new American Standard Safety Code has been approved and published by the American Standards Association. It is the *American Standard Safety Code for Open-Surface Tanks*, Z9.1-1951.

Operations involving immersion of materials in liquids and their subsequent removal are covered in this code. These include electroplating, washing, anodizing, pickling, quenching, dyeing, dipping, tanning, dressing, bleaching, degreasing, alkaline cleaning, stripping, rinsing, and digesting.

The safety of the operator is the primary concern of this standard. The provisions are intended to protect him from contact with gases, vapors, mists, or liquids involved in any open-surface tank operation that might injure his health.

The standard classifies open-surface tank operations into twelve classes depending upon the relative need for controlling the gas, vapor or mist rising from the tank. Tables are included to allow classification of any open-tank operation from a knowledge of the tank temperature; the boiling point, flash point and relative evaporation rate of the liquid in the tank; the maximum allowable concentration in the air of the vapor or mist produced; and the extent that the operation produces mist. Ventilation requirements vary with the need for control as indicated by the classification of the operation.

The standard stipulates for each "class" a minimum control velocity for enclosing hoods with one or two open sides; for canopy hoods with three or four open sides; and for lateral exhaust with no hood over the tank. The procedure is also outlined for computing the ventilation rate (in cubic feet of air per minute) required to maintain the necessary control velocity for each hood type and includes a number of examples of these computations.

Rules on personal protection are included as well as rules on operation; inspection; maintenance

SAFETY EQUIPMENT—FOR ALL INDUSTRIES

READY FOR  
**IMMEDIATE  
USE!**



**IPCO**

***Roller  
Type***

## FIRE BLANKET

Envelops entire body in a few seconds . . . One arm is put through the rope loop and a turn of the body is all that is necessary. End of blanket automatically detaches from the roller and permits escape from danger zone if necessary. Blanket is 80% wool. Size 60" x 80" . . . FURNISHED WITH OR WITHOUT WEATHER-PROOF METAL CONTAINER.

Write for Bulletin K-51.



*Safety Equipment for all Industries*

**INDUSTRIAL PRODUCTS COMPANY**

2850 N. FOURTH STREET • PHILADELPHIA 33, PA.

and installation; special precautions for cyanide; and vapor degreasing tanks. Provision is made to allow the use of both control means other than ventilation, and methods of ventilation involving supplied as well as exhausted air. When an operation has both a low hazard potential and a low rate of gas, vapor or mist evolution, general room ventilation by either natural or mechanical means is considered safe and acceptable as the control means.

The appendix includes tables of the resistance to corrosion of materials used for hoods, ducts and exhaust fans, as well as seven pages of typical exhaust hood designs.

This standard is a revision and expansion of the American Standard *Safety in Electroplating, Z9.1-1941*. Work on the revised code was sponsored by the American Industrial Hygiene Association, the American Society of Heating and Ventilating Engineers, and the National Association of Fan Manufacturers. Under the procedure of the American Standards Association, labor groups, government departments, insurance concerns, manufacturers, and users of this equipment were represented on the committee that developed the standard.

### Study Conservation of Executive Man Power

PERIODS of industrial mobilization, such as the country is just entering, mean greater work loads, long hours, and increased nervous tension for most executives. Under such conditions, safeguarding the health of the management group becomes most important to any company, large or small.

These facts are brought out by the report, "Health Examinations for Executives," recently released by the Policyholders Service Bureau of the Metropolitan Life Insurance Company.

This report, which is a joint effort of the Metropolitan's Medical Division, Health and Welfare Division and Policyholders Service Bureau, is based on the survey of companies attempting to conserve executive man power through periodic health examinations. The report estimates at least 400 com-



Here's an AMAZING BRAND NEW SAFETY SIGN that will be welcomed by Safety Men! Brady Safety Signs stick to wood, glass, metal, concrete, etc. without moistening. May be applied to any clean surface in a jiffy. No screws, nails, bolts or skilled help necessary. All you do is peel from card, apply where wanted and the sign is up to stay.

Brady Safety Signs are made of durable cotton cloth, Silicone Coated to resist dirt, grime and moisture. CONFORM TO ASA Standard Z35.1-41. Select your requirements from a complete catalog of standard safety messages. Cost only a few cents per sign. Immediate delivery. Specials made to order.

WRITE FOR  
Free  
SAMPLES  
AND  
USUAL  
CATALOG



The **NAME...**  
Tells the **STORY!**  
*dura-fred*

**QUICK-FLOOR**

● Instant-use from drum to floors worn, damaged or broken. QUICK-FLOOR resurfaces aisles, platforms, ramps, stairways, without delays or down-time. The sooner you let trucks roll over it the tougher it gets.

- FOR CONCRETE, METAL, WOOD, OR ASPHALT.
- LAY IT ON A SQUARE FOOT A MINUTE.
- WILL NOT CRACK OR CRUMBLE, GETS HARDER.
- ORIGINAL FLOOR PATCHER AND SURFACER SINCE 1938.

Write for name of nearest dealer.



*dura-fred Co.*

361 N. Central Park Blvd., Chicago 24, Illinois



read this



Learn about Frost's SURE-FOOT Non-Slip Abrasive Paint—the paint with the positive traction that remains non-slip wet or dry.



will eliminate these potentially dangerous areas—whether surfaced with steel, aluminum, wood or concrete:

- Stairways
- Inclines
- Aisles
- Landings
- Traffic Lanes
- Sidewalks
- Platforms
- Cat Walks
- Observation Platforms
- Approaches
- Elevator Floors

**EASY TO APPLY**—SURE-FOOT spreads like ordinary paint on any clean, dry surface. No formulas to mix and no special tools or skilled workmen required in its easy application.

**ECONOMICAL**—Low in initial cost, SURE-FOOT offers low cost coverage . . . costs less than 10¢ per square foot installed.

**EASY TO RE-PAINT**—Carbide crystals provide the non-slip element in Frost's SURE-FOOT Paint. Easily renewed where heavy traffic eventually wears through. Just re-paint—no stripping or removing of old paint.

Write Today . . . to Dept. B. for the SURE-FOOT Bulletin. Discover for yourself how inexpensively you can eliminate slippery conditions in your plant.



panies in the United States and Canada already have developed such programs, which gained general acceptance during the industrial mobilization of the Second World War.

Contributors to the report include 118 companies having executive health examinations and 44 clinics conducting examinations. The information they provided has been broken down in the report to sections on the benefits of health examination programs; the situation in small companies; the executive levels included; the scope, cost and frequency of examinations; the use of company-employed and outside physicians; confidential treatment of information; follow-up procedures; the forms and records employed, and the examination procedures followed by clinics.

### Benny Can Still See!

BENNY FERNANDEZ, an employee of the Colorado Fuel & Iron Company, Pueblo, got hit in the face with a splash of molten iron. But he can still see—thanks to the goggles he was wearing at the time.

The accompanying illustrations show Benny's face after the acci-



dent, progress in healing, and the goggles that stood between his eyes and the splash. Benny has gladly given his consent to the use of his name and picture to aid in the promotion of eye protection.

The illustrations and story were used on the front page of *CF & I Blast*, the company's publication. The photos were also used in the *Denver Post* and *Time* magazine.

**RAISE YOUR WATCHMAN'S EFFICIENCY**

**LOWER YOUR INSURANCE COSTS**

**Get This Folder**

**WHO'S WATCHING YOUR WATCHMAN TONITE?**

with the  
**CHICAGO WATCHCLOCK System** Puts Pep in the Step of Watchmen

**Pays for Itself**—  
quickly—through reduced insurance rates. Then makes money for you, year after year! Greatly increases your protection against fire, theft and vandalism. Costs little. Anyone can install system. Only tool needed is a screw driver! Used all over the world! Write today to:

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Division of GREAT LAKES INDUSTRIES, Inc.  
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1524 S. Wabash Ave., CHICAGO 5  
Offices in Principal Cities

- Increased Production . . .
- Higher Employee Efficiency . . .
- Lower Manufacturing Costs . . .

with Pittsburgh  
**COLOR DYNAMICS!**

Works Manager of Aetna-Standard Engineering Company reports scientific use of energy in color is an excellent business investment that benefits workers and management alike.

PITTSBURGH can present no more convincing statement of the many benefits that result from the use of COLOR DYNAMICS—based upon the scientific principles of the *energy in color*—than this letter from R. D. Johnson, Works Manager of The Aetna-Standard Engineering Company of Youngstown, Ohio, consultants, designers and builders for steel and non-ferrous industries.

● "We are pleased to summarize what application of your system of COLOR DYNAMICS has done for our Ellwood City, Pennsylvania, plant.

● "It was our custom to paint our plant and equipment periodically, mainly for the purpose of protecting surfaces.

● "Painting can be a business investment, the same as machine tools and equipment. When a machine tool is purchased, the effect this tool will have on cost savings, production, employee efficiency, etc., are considered very carefully. Why not apply this rule to painting?

● "With this thought in mind, we asked

color engineers of The Pittsburgh Plate Glass Company to visit our plant to explain the advantages of COLOR DYNAMICS.

● "The survey was made and the suggestions made by Pittsburgh color engineers were highly acceptable to our management.

● "In a recent survey we were pleased with the reactions and comments of our plant employees.

(a) General appearance was greatly improved.

(b) Better light reflection from ceiling and walls caused less eyestrain.

(c) Specially marked lines signified hazards and helped to reduce accidents.

(d) Housekeeping was simplified. Employees take pride in their work area and help to keep it clean.

(e) Improved morale helped to increase efficiency as well as to create better industrial relations.

● "Considering every factor, we believe that Pittsburgh COLOR DYNAMICS has contributed greatly to the success of our operations."

#### You Can Have A Color Engineering Study of Your Plant FREE on Request

● Why not investigate what Pittsburgh COLOR DYNAMICS will do for your plant? For a complete explanation of how this scientific painting system can be made to work for you, send for our free, profusely-illustrated booklet.

● Better still, let us make a detailed COLOR DYNAMICS study of your plant for you—free and without obligation. Call your nearest Pittsburgh Plate Glass Company branch and arrange to have one of our trained color engineers see you at your convenience. Or mail coupon.

#### SEND FOR A COPY OF THIS BOOK!

Pittsburgh Plate Glass Co., Paint Div., Department NS-51, Pittsburgh 22, Pa.

☐ Please send me a FREE copy of your Booklet "Color Dynamics in Industry."

☐ Please have your representative call for a Color Dynamics Survey of our properties without obligation on our part.

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# PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

# SAFETY

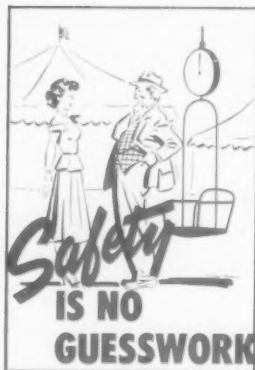
# POSTERS

## IMPORTANT

**A**LL miniatures shown on these pages are of **NEW** posters — produced for the first time this month. Excepting the Jumbo poster (below, left) all will be available during the remainder of 1951. Those displayed on the following pages in

black and white are actually printed in two or more colors. We suggest you refer to this copy of the News in making monthly selections.

In addition to these new posters, you will find a great variety of subjects among the 744 posters illustrated in the 1951 Directory of Occupational Posters, and which will also be in stock throughout 1951. For a proven plan of selecting your posters objectively, refer to pages 4 and 5 in the Directory—a copy of which has been sent to all National Safety Council members. Additional copies are available at 50 cents each—write Membership Dept., N.S.C.



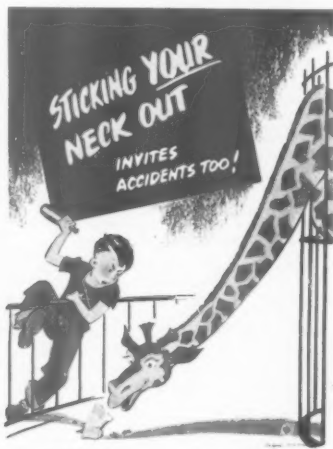
9249-C

25x38

Above new "C" poster, issued monthly, is indicative of the other two color posters—shown in black and white on the following pages and in the 1951 Poster Directory.



The Jumbo poster, issued monthly, is designed for outdoor use and is available to members on annual subscription but is not stocked. Its actual size is 9' 11" by 11' 8".



9211-A

8 1/2 x 11 1/2

This new four color poster is illustrative of the 72 four color posters shown in the 1951 Poster Directory.

Electrotypes of poster miniatures on this page are not available, nor can payroll inserts be supplied.

National Safety News, May, 1951

Posters below are printed in two or more colors  
(Available only in sizes indicated)



NATIONAL SAFETY COUNCIL

9288-A

8½x11½



NATIONAL SAFETY COUNCIL

9279-B

17x23



NATIONAL SAFETY COUNCIL

9221-A

8½x11½



NATIONAL SAFETY COUNCIL

9163-A

8½x11½



NATIONAL SAFETY COUNCIL

9283-B

17x23



NATIONAL SAFETY COUNCIL

9148-A

8½x11½



NATIONAL SAFETY COUNCIL

9274-A

8½x11½



NATIONAL SAFETY COUNCIL

9224-B

17x23



NATIONAL SAFETY COUNCIL

9168-A

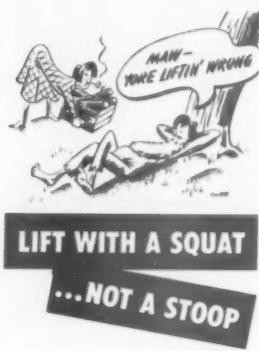
8½x11½

Electrotypes or payroll inserts can be furnished on all poster illustrations shown above.

Posters below are printed in two or more colors  
(Available only in sizes indicated)



NATIONAL SAFETY COUNCIL  
9278-B 17x23



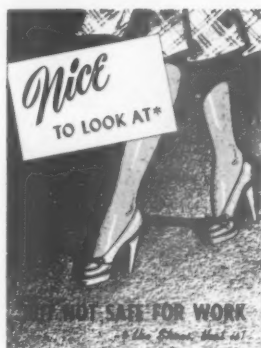
NATIONAL SAFETY COUNCIL  
9232-A 8½x11½



NATIONAL SAFETY COUNCIL  
9267-A 8½x11½



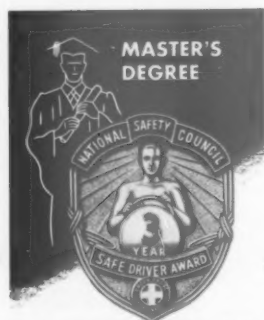
NATIONAL SAFETY COUNCIL  
9139-A 8½x11½



NATIONAL SAFETY COUNCIL  
9186-A 8½x11½



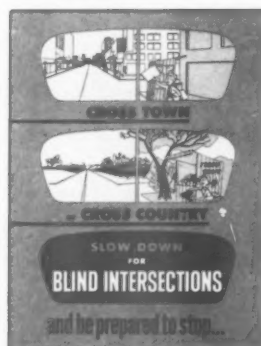
NATIONAL SAFETY COUNCIL  
T-9262-B 17x23



in the Art and Science of Safe Driving  
NATIONAL SAFETY COUNCIL  
V-9296-A 8½x11½



NATIONAL SAFETY COUNCIL  
V-9295-A 8½x11½



NATIONAL SAFETY COUNCIL  
V-9294-B 17x23

Electrotypes or payroll inserts can be furnished on all poster illustrations shown above.





### New Off-the-Job Safetygraph

Safetygraph No. 20, just off the press, is the first in this popular series of visual training aids to attack the problem of *Off-the-Job Safety*. By indirection, the points on off-the-job safety are designed to stimulate on-the-job safety also.

Through drawings and cartoons for the group to view, each page points to a common type of hazard found in the home or on the streets and highways. Throughout, safety measures which employees are trained to observe at work are mentioned as good guides for the practice of safety in the home. Falls, particularly on stairways; electrical accidents; fire; unsafe driving and walking are among the subjects.

The copy for the leader's use, printed on the reverse sides of the pages, carefully steers clear of a patronizing air; it is direct, simple, and friendly. The employee is reminded that at work his foreman helps him follow safe practices, but that at home he has to be the safety man for himself and for members of his family.

Designed as a teaching device for small groups, Safetygraph No. 20 is printed in six combinations of color. It has 12 pages and is 18 by 24 inches. It is available either alone or in an easel type binder.

Member prices: Safetygraph with binder, 1 to 9 copies, \$14.55 each; 10 to 99 copies, \$13.75 each; 100 or more, \$13.20 each; Safetygraph only, 1 to 9 copies, \$11.00 each; 10 to 99, \$10.45 each; 100 or more, \$9.90 each.

### Vacation Leaflet

*Have Fun* is a brand-new leaflet prepared for distribution to employees as they are about to leave on vacation. Along with good wishes for a happy time, it carries

tips on many vacation hazards and tells how to avoid them.

Lively cartoons illustrate some of the major hazards of swimming, hunting, fishing, boating, and other vacation activities, and concise copy points out pitfalls for the unwary. A safe and sane attitude on exercise and on exposure to the sun is also briefly outlined.

Printed in two colors on colored stock, this 8-page leaflet is 3½ inches by 8 inches, a convenient size for mailing to the employee's home. Space is provided for a company imprint message. Because it is concerned with leisure time pursuits, it will be of interest to the worker's family too.

Member prices: 1 to 9 copies, 10 cents each; 10 to 99, 6 cents each; 100 to 999, 4½ cents each; 1000 to 4999, 3½ cents each. For a sample copy and for prices of quantities over 5000, write the Membership Department of the Council.

### New Instruction Cards

Two new Safety Instruction Cards, applicable throughout in-

dustry, are now in stock. No. 655 gives information on when and how to use water pump tank fire extinguishers. No. 778 is a check list for inspection of mechanical apparatus, covering power transmission enclosures and guard rails, controls, and point of operation guards.

Member prices: 1 to 9 copies, 5 cents each; 10 to 99, 2½ cents each; 100 to 999, 19/10 cents each; 1000 to 4999, 1 7/10 cents each. For sample copies and for prices of quantities over 5000, write the Membership Department of the Council.

### "Mine Hoisting Rope"

Engineering Study Mining No. 6, recently completed, presents the results of a survey on practices in inspecting and maintaining hoisting ropes in mines in the United States and Canada. Entitled *Mine Hoisting Rope*, it covers types of rope installations and general methods followed in keeping them safe. The 8-page publication is illustrated with photographs and charts.

Member prices: 1 to 9 copies, 29 cents each; 10 to 99, 24 cents each; 100 to 999, 18 cents each; 1000 to 4999, 14 cents each.

### New Safety Reprints

Two publications recently added to the Council's series of Safety Reprints are Safety Reprint General No. 18 (four pages), *The Industrial Nurse—Member of the Safety Team*, by Vera S. Johnson, R. N., and Safety Reprint General No. 19 (one page), *Sunglasses—Facts and Fiction*, by Col. Victor A. Byrnes (MC).

Member prices: 1 to 9 copies, 17 cents each; 10 to 99, 13 cents each; 100 to 999, 8 cents each; 1000 to 4999, 7 cents each.

### Operation Safety

Plant safety directors are the first to recognize the difficulty of coping with off-the-job accidents, particularly those which involve the employee as pedestrian or driver.

The Council's Operation Safety program deals exclusively with this phase of off-the-job training and is widely used by local community safety councils in the planning of their traffic activities.

Of special interest to plant safety directors is the May theme of

#### MECHANICAL APPARATUS INSPECTION

Check the points listed below. Make recommendations to cover unsatisfactory conditions so that they can be corrected promptly.

#### POWER TRANSMISSION ENCLOSURES

ON GUARD RAILS	OK
Pulleys, flywheels . . . . .	<input type="checkbox"/>
Gears, sprockets, chains . . . . .	<input type="checkbox"/>
Belts: vertical, horizontal . . . . .	<input type="checkbox"/>
overhead horizontal . . . . .	<input type="checkbox"/>
Belt shifters . . . . .	<input type="checkbox"/>
Keys, setscrews, collars, couplings . . . . .	<input type="checkbox"/>
Shafting . . . . .	<input type="checkbox"/>
Clutches . . . . .	<input type="checkbox"/>
Lubrication facilities . . . . .	<input type="checkbox"/>

#### CONTROLS

Electrical starting devices . . . . .	<input type="checkbox"/>
Lockout devices . . . . .	<input type="checkbox"/>
Tripping devices: foot, hand . . . . .	<input type="checkbox"/>

#### POINT OF OPERATION GUARDS

In place . . . . .	<input type="checkbox"/>
Condition satisfactory . . . . .	<input type="checkbox"/>
Correct adjustment . . . . .	<input type="checkbox"/>

SAFETY INSTRUCTION CARD No. 778  
National Safety Council  
PRINTED IN U.S.A.



Sizes 3 feet to 16 feet in height (measured from ground to platform). Standard rubber safety shoes at no extra cost.

### For Safety's Sake Use

## DAYTON SAFETY LADDERS

Maintenance men everywhere rely on Dayton Safety Ladders for maximum safety and convenience. Daytons are constructed of tested airplane spruce and reinforced with rigid steel supports to give great strength and lightness of weight.

Handrails of steel guard the large roomy platform for added safety. Half of platform can be raised to form an extra step, when needed. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use.

Write today for Bulletin No. D-8

## DAYTON SAFETY LADDER CO.

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LIGHTWEIGHT  
MAGNESIUM

## RAMP-DOCKBOARDS

...are flexible for greater  
freight-loading efficiency

← Ramp and Dockboard lock together with simple pin device

Hand holds in each corner for safe, easy handling

Beveled edges minimize jarring of load

Rounded curb ends allow greater turning radius

Special quarter round curbs prevent runoffs—offer maximum clearance for equipment

A combination of two sections—the ramp (with I-beam legs), and the Dockboard. Each lightweight magnesium unit can be handled safely and easily by one person. Dockboard is used as separate unit when height difference is less than fixed height of ramp. When greater height differences are encountered, the ramp and Dockboard combination is used.

Specially designed for applications where low-clearance loading equipment is used. Weighs only 1/2 as much as steel ramps of equal size and strength. A modern answer to materials handling headaches in all industrial and commercial fields. Write for complete details today!

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Operation Safety: Vehicle Maintenance. This is a phase of traffic safety that makes sense to the mechanically inclined employee and, because of its acceptability to him, makes him more appreciative of traffic safety education generally.

Complete information, subscription and material prices (leaflets, posters, film trailers, announcements suitable for public address systems, filler material for plant publications, and so on) or the names of those who receive Operation Safety in the community are available upon request from the Traffic and Transportation Division of the Council.

### Utility Men Study Safety for Defense

Twenty utility company representatives from United States and Latin American companies attended the fourth annual seminar in Public Utility Safety, recently completed in New York. The seminar, conducted jointly by Ebasco Services Incorporated and New York University, was the fourth of the series arranged by the two institutions.

Although the series was planned as a course for safety directors, the most recent one turned out to be a training course for supervisory and executive personnel. This year's group included eight safety men and twelve operating men—chief engineers, division managers, and division superintendents.

When the course was started, virtually the entire class consisted of safety directors. It was set up as a training medium to bring safety directors up to date on developments in field practices. This year's session included discussions of safety measures in case of bombing attack.

The men were told that a good way to emphasize the need for a safety program to management is to show the high cost of accidents. They were told about a recent survey of a group of 15 gas, electric and combination gas and electric companies in this country for the purpose of determining their accident costs and the cost of safety work. The average cost to these companies was found to be \$430 per disabling injury case.

"Safety takes on added importance today, when we are faced

with the accelerated mobilization of manpower for defense," said W. T. Rogers, Ebasco safety consultant and director of the course. He stated that man hours lost as a result of accidents in industry would provide the equivalent of 706,000 workers.

During the seminar the importance of management's part in carrying out, as well as setting up, a good safety program was stressed. Management must select the right men for safety assignments, give them the proper tools, and then continue to check on progress made.

Since a considerable part of the effectiveness of safety and operating personnel lies in their ability to speak clearly and convincingly, a good deal of time was spent on effective speaking. These highly successful sessions were conducted by Dr. Walter A. Cutter, assistant director of N.Y.U.'s Center for Safety Education, who instructed the members in the various elements of speaking.

The course on safety training is also given considerable time in the curriculum. The training course covers the psychology of learning; techniques for making instruction effective; relationships between supervision and teaching; principles and practices in selecting and organizing instructional content; the use of the lecture-discussion and question-answer techniques; the uses and limitations of the demonstration method; and motivations for effective learning.

Other courses included in the seminar were: Effective Relations; Formula for Supervision; Safety Programs in Public Utilities; Motor Vehicle Safety; and Fire Prevention and Protection. The courses held at New York University were conducted by the Center for Safety Education under the direction of Dr. Herbert J. Stack.

Several field trips were arranged for the men attending the seminar. They inspected the training school of the Long Island Lighting Company and visited the Consolidated Edison Company, where they reviewed the safety program. On a visit to the C.O. Two Fire Equipment Company, they saw a demonstration of fire protection methods and equipment.



## I KNOW I'M SAFE...

with **WOODEN SOLES!**

- Heat resistant wooden soles
- Strong steel toe

### FOR THE FACTORY...

No. 304 S

Wear a Reece "Strong Toe." Comfortable leather uppers. High, roomy steel toe protector, heat-resistant wooden sole. Have comfort-safe feet at work in oil refineries, foundries, steel mills, factories.




### ...FOR THE FOUNDRY

The Reece "Hot Foot" sandals. Protect your feet in furnace and coke oven rooms. Straps on over your own shoes. Heat resistant wooden sole, strong galvanized iron counter, flexible hinge toe. Cannot slip.

BE SAFE THE REECE WAY... WITH A REECE "HOT FOOT" SANDAL!

There is no substitute for Reece Wooden soles

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Dept. M55 Columbus, Nebraska

## FOR GREATER SAFETY!

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### CONNECTING LINKS

SAFETY • STRENGTH • SIMPLICITY • ENDURANCE



Combination sling of wire rope and chain, connected by Wedglok safety links

A VASTLY IMPROVED connecting link that combines safety with unique simplicity in assembly. Its strength exceeds the published strength of comparable alloy chain . . . assembles rapidly without the use of special equipment.

WEDGLOK is widely used in steel mills, foundries, structural fabricating plants and other material handling operations in which on-the-spot replacement of links is important.

Regular and peal shape. Sizes  $\frac{3}{8}$ " to 3".

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WHAT'S IN THIS PIPE?

YOU KNOW WHAT'S IN THIS ONE

**CITY GAS**

YOU CAN TELL AT A GLANCE  
WITH  
**QUIK-LABEL PIPE MARKERS**

Identify every pipe in your plant quickly and inexpensively with Brady Pipe Markers. They give you a uniform system of identification based on ASA Standard A13. Anyone can apply and everyone can identify the pipe contents and direction of flow. Cut maintenance time. Make your plant a safer place to work. Over 235 different markers in stock. Specials made to order.

QUIK-LABELS come on handy dispenser cards. They are printed in large black letters on approved ASA background colors. Applied in a jiffy—they stick without moistening. Use indoors or outdoors. Cost only a few cents per marker.

WRITE FOR  
Free  
SAMPLES  
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DISTRIBUTORS IN OVER 125 PRINCIPAL CITIES

MANUFACTURERS OF SELF-STICKING PRODUCTS

PIPE MARKERS	<b>W.H. BRADY COMPANY</b>	EST. 1930
PIPE MARKERS		
SAFETY SIGNS		
PRINTED "STICK-ON" TAPES		

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**NEW  
PERMANENT  
NON-SLIP**



**FIRM-GRIP**  
*Genuine*  
NEOPRENE LATEX  
**GLOVES**

- ✓ Permanent NON-SLIP on all 5 Fingers and Palm. Highly efficient embossed surface is *integral part* of glove.
- ✓ Impregnable to ACIDS, CAUSTICS, OILS.
- ✓ Curved FINGERS for Comfort and Easy Use.

No. 5740-5 LONG GAUNTLET  
Length 14", Gauge .030 to .040  
Sizes 9, 10, 10½, 11, 12

No. 5720-5 LIGHT DUTY  
Length 10½", Gauge .017 to .020  
Sizes 7, 7½, 8, 8½, 9, 9½, 10, 11

★ Write for sample and prices

**SEIBERLING**  
LATEX PRODUCTS CO.  
AKRON 9, OHIO

200-5th Ave., New York  
Merchandise Mart, Chicago

At Fort Jay, Governor's Island, they learned about the First Army's safety program, which has cut down the automotive accident rate from 14 accidents per 100,000 miles traveled to 2 per 100,000 miles. The men saw demonstrations of tests made by the army in its driver selection program and learned about the equipment used.

Upon completion of the seminar, diplomas were presented at graduation exercises held at The Downtown Athletic Club in New York.

### New Record for Clay Products Industry

A new safety record for the heavy clay products industry was established January 22 by Gladding, McBean & Company, Southern Division. As production at the company's four Southern Division heavy clay products manufacturing plant rolled up more than 2.6 million man-hours worked without a disabling injury, all former records were passed by a comfortable margin.

The sewer pipe departments at the Glendale and Santa Monica plants have bettered the perfect two-year record of the other departments by adding up a total of 773 days without a disabling injury, despite the handling of clay pipe weighing as much as 3500 pounds per piece. The national average for the clay products industry is 22 disabling injuries per million man-hours worked.

Southern Division production operations also set a new lower accident severity rate than the average of any other industry. The communications industry, according to the 1949 injury rates as reported by the National Safety Council, has the lowest average accident rate of all industries, with a total of 68 days charged per injury, or .15 per cent for each thousand man-hours worked. In the same report, clay products ranked as the sixth most hazardous industry.

To appreciate the record better, comparison must be made with the company's record of six years ago. At that time 96 disabling injuries occurred per million man-hours worked, with a severity rate of 5.15 days lost per thousand hours worked, and an average of 173 days lost per injury.

*"I know of  
no savings plan  
better suited  
to individuals..."*



**HAROLD H. SWIFT**

Chairman of the Board, Swift & Co., Inc.

*"I know of no savings plan better suited to individuals than buying U. S. Government Bonds through the payroll deduction plan. Systematic saving in this manner is an excellent way to produce a backlog of security for future need."*

Let's take a look at the Payroll Savings Plan.

Introduced in 1941—and quickly taken up by industry—Payroll Savings offered employed men and women an opportunity to build for individual and national security through systematic savings in *U. S. Defense Bonds*.

During the war years, Americans continued to save—and helped to finance a large part of the cost of the war—by Payroll purchases of *U. S. War Bonds*.

In the post-war period of adjustment, billions of dollars in bonds provided an economic cushion new to this or any nation. Inflation would have been a far more serious problem had these billions of dollars been used for competitive spending.

Since VJ Day, men and women have continued to build security through easy, systematic Payroll purchases of *U. S. Savings Bonds*.

In June 1950, Americans held a total of 56 billion dollars in *U. S. Defense, War and Savings Bonds*, a figure higher than that held on VJ Day. More than 8,000,000 employees, in 21,000 large companies (employing 100 or

more) were saving, month after month, in *U. S. Savings Bonds*.

In November, 1950, thousands of top executives took a look at their Payroll Savings Plans. Then, through a simple person-to-person canvass of their employees they made sure that every man and woman was given a Payroll Savings Application Blank and an opportunity to make his or her own decision. The results would be astonishing to any but Americans. Without pressure or emotional appeal, employee participation jumped from 30%, 40%, to 80% . . . 85% and even higher. More than a million workers have joined the Payroll Plan or increased their monthly investment.

Take a look at your company's Payroll Savings Plan. See that every employee—particularly the newer ones—are given a Payroll Savings Application Blank—and an opportunity to save through monthly investment in *U. S. Defense Bonds*. Phone, or write to *Defense Bonds Division*, U. S. Treasury Department, Suite 700, Washington Building, Washington, D. C. Your State Director is ready to help you help your employees and your country.

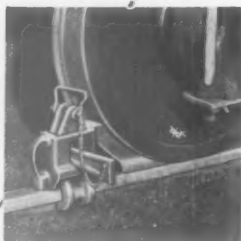
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**the M & M RAIL CLAMP holds  
car wheels fast—it will not slip!**

Because it reduces danger of injury to workers and of costly derailments, the M & M Rail Clamp is approved and used in all industries . . . on loading platforms, cars on grade, on car ferries, sidings, traveling cranes, crane shovels and excavators. The M & M Rail Clamp is strong in construction, simple to use. Body is electric furnace steel casting; lugs and wedges are highest grade drop forgings. No blocks, ties or shams necessary—saves time in moving up. Made to fit any rail, worn or new. Write for further information and prices.

**SAFETY FIRST SUPPLY COMPANY**

425 Magee Street, Pittsburgh 19, Pa.

## *Comes Spring . . .*

**time for IDU protection from**

# POISON IVY

**and**

# POISON OAK

For more than a decade IDU Skin Lotion\* has been giving outdoor workers—linemen, utilities workers, gardeners and foresters—the protection they need from poison ivy and poison oak.

These two spring and summer-time hazards to health and efficiency will soon become troublesome. Be prepared.

Don't let these irritating conditions develop—use IDU for their prevention. Order now.

\* Used for More Than 10 years by Wisconsin Public Service. Available at the following prices to public utilities: 4 oz. bottles, \$6.00 a doz.; 8 oz. bottles, \$10.00 a doz.; 1 pint bottles, \$16.00 a doz. FOB Wausau, Wis.

Send us a penny post card for a generous free sample.

**I. D. U. PRODUCTS CO. WAUSAU, WIS.**

During the period in which the record was established, more than 280,000 tons of finished products passed through the four Southern Division plants. Superintendents Homer Dye at Glendale, Jack Fletcher at Los Angeles, Ben Taylor at South Gate, and Malcolm Post at Santa Monica have worked closely with their crews to incorporate every precautionary measure in their operation.

In 1946 and 1947, the company won the National Safety Council First Place Safety Award for the ceramic industry. In the Southern California Industrial Safety Contest in 1949, Santa Monica and South Gate won first place with perfect records in each plant, and Glendale won second place in its classification. In the same contest the Los Angeles plant earned an over-all contest award for making the greatest improvement in its safety record.

Other units of the company, while not maintaining a perfect record, have reduced the frequency rate to less than 5.0 and the severity rate to less than .06.

## **AEC Injury Rate Down 22 Per Cent**

During 1950 the national atomic energy program was operated with an average of 4.67 employees injured for every million man-hours worked, a 22 percent improvement over 1949, the U. S. Atomic Energy Commission has announced. The 1949 rate for all U. S. industry, the most recent reported by the National Safety Council, was 10.14.

A break-down of the 1950 safety figures shows the following:

1. AEC operations contractors in 1950 incurred employee injuries at a rate of 3.32 per million man-hours, compared with a rate of 7.4 for workers in the chemical industry, the nearest comparable, according to preliminary data compiled by the Bureau of Labor Statistics for 1950.

2. Construction workers on atomic energy projects recorded an injury rate of 8.35 for 1950 which was 17 percent below the 1949 rate. The rate for all U. S. construction in 1949, the latest NSC figure available, was 19.48.

3. AEC direct employee injuries in 1950 occurred at a rate of 2.05 per million man-hours compared with 3.98 in 1949. The 1950 injury rate for all Federal civilian employees, as compiled by the Federal Interdepartmental Safety Council, was 7.57.

4. The motor vehicle accident rate, including all AEC-owned vehicles, whether driven by AEC or contractor employees, was 1.50 accidents per 100,000 miles driven in 1950 compared with 1.62 in 1949. The national average for the period July 1, 1948, through June 30, 1949, the latest period for which NSC figures are available, was 3.13.

5. There were eight fatalities in the atomic energy program in 1950 compared with six in 1949. None were due to radiation. Expressed in terms of rate per 100,000 workers, the fatality rate for 1949 was 10.2 and for 1950 was 13.1. The NSC fatality rate for all U. S. industry in 1949 was 26.0.

The only category to show a substantial increase in 1950 over 1949 was industrial property loss due to fire. The dollar value of this loss in 1950 was \$486,389, compared to \$48,096 in 1949. This increase was due mainly to fires in an engineering building at the Berkeley Radiation Laboratory and in an electrical switchyard at Oak Ridge. No employee was injured in either fire. The 1950 AEC fire loss, despite these two large fires, was 2.5 cents per \$100 valuation compared with a national average of 15 cents.

Important contributors to the safety record of the atomic energy program are 20 contractors and four AEC field offices who have worked without disabling a single employee in either 1949 or 1950. These are:

Operations Contractors—North American Aviation, Downey, Calif.; Galigher Company, Monticello, Utah; U. S. Geological Survey, Grand Junction, Colo.; Sandia Corporation, Brawley, Calif.; American Smelting & Refining Company, Grand Junction, Colo., and Monticello; Southern Railway Company, Oak Ridge; United Lead Company, Middlesex, N. J.; Linde Air Products Company, Tonawanda, N. Y.; Western Reserve University, Cleveland, Ohio; Sylvania Electric Products, Bayside, N. Y.; Roy W. Christy Company, Decatur, Ill.

Construction Contractors and Architect-Engineers — Blaw-Knox Construction Company, Idaho Falls, Idaho; Austin Company, Oak Ridge; Skidmore, Owings & Merrill, Oak Ridge; Ralph M. Parsons Company, Los Alamos, N. M.; James Thompson & Sons, Ames, Iowa; Sargent & Lundy, Oak Ridge; Max Flatow, Albu-

## Pick your 6 employees who have had most accidents



Don't tell them what it's all about—just let our man test their eyes (the test takes less than four minutes).

A large percentage of workers with high accident and spoilage rates are handicapped by defective vision.

Thousands of plants have found that they simply cannot afford to hire a worker without testing his eyes. Periodic re-checking also pays them handsome profits.

Write us for a sample test of a few of your below-average employees—or for Bulletin N.

**KEYSTONE VIEW COMPANY, Meadville, Penna.** Established 1892. Originators of Binocular Vision Testing in Industry.

**KEYSTONE** Occupational Visual Service

## BEAT THE HEAT!

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### E-X-P-A-N-D-E-D COTTON® SWEAT BANDS

ONLY 2½¢  
EACH



**FEATHER-LIGHT**—You feel only soft cool, comfort!

**\*E-X-P-A-N-D-E-D COTTON**—Cotton-backed gauze expanded to 8 times normal thickness!

**FOUR-LAYER FOLD**—Extra absorbent capacity!

**NO METAL**—Only pure cotton and cotton-covered elastic. No rusting, chafing, no discomfort.

So inexpensive, they can be used and thrown away...  
So strong, they can be rinsed and used repeatedly!

Here's the answer to perspiration...super-soft, super-absorbent E-X-P-A-N-D-E-D COTTON SWEATBANDS. Real comfort for those hot-spot jobs... a better band at a lower price.

Perfectly designed. No metal parts to rust or chafe, cotton-covered elastic holds band firmly but you can't even feel it. Get E-X-P-A-N-D-E-D COTTON SWEATBANDS from your regular dealer in safety or first aid supplies. Write us for free sample today.

**GENERAL BANDAGES, INC., Chicago 3**

Makers of GAUZX—The bandage that sticks to itself



## Group of RUEMELIN Fume Collectors Keeps Shop Clear of Welding Fumes

This well ventilated welding department is typical of hundreds of similar installations. Welding operators appreciate smoke and gas-free atmosphere. Thousands in service. Many repeat orders. Collecting fumes at the source with local exhaust hoods has proven most practical in operation. Write for Bulletin 37-D describing all types of Ruemelin Fume Collectors.

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LP-90.



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querque, N. M.; General Electric Realty Corp., Schenectady, N. Y.; Consolidated Western Steel Corp., Los Alamos.

AEC field offices—Chicago Operations Office, Chicago; Idaho Operations Office, Idaho Falls, Idaho; Schenectady Operations Office, Schenectady, N. Y.; Colorado Raw Materials Office, Grand Junction, Colo.

In addition, 12 atomic energy contractors and one AEC field office have been declared winners of the 1950 AEC Safety Contest, an annual feature of the AEC's safety program. A total of 90 contractors and 9 AEC field offices were grouped in the competition according to kind of work and number of employees, and winners were designated on the basis of greatest percentage of improvement in decreasing employee injuries in 1950 over their respective injury records for the preceding year. These contest winners, while their achievements compare only slightly less favorably than those named above, have given major emphasis to the AEC's safety program.

General Electric Company, operating the Hanford Production Plant, headed the list of larger industrial contractors in the contest by cutting its injury rates 67 per cent under its rates for 1949. GE production employees of Hanford, located at Richland, Wash., suffered only one injury for every two million man-hours of work in 1950.

The Bendix Aviation Corp., Kansas City, Mo., lowered its rates 86 per cent in 1950 to win in Group II Operations, while Columbia University, New York City; University of California, Los Angeles; and Battelle Memorial Institute of Columbus, Ohio, tied for first place in Group III with no disabling injuries during the year.

The Austin Company, Lemont, Ill., topped Group I Construction with a decrease of 50 per cent in rates, while the Kellogg Corp., New York City, won in Group II with no disabling injuries for 1950. Winners with 100 per cent rate-reductions in Group III of the Construction Division were Kistner, Curtis & Wright, Brawley, Calif.; Black & Veatch and W. C.

Kruger Associates, both at Los Alamos, N. M.; and Walker-Ly-barger Company, Grand Junction, Colo.; while Maxey & Leftwich, Oak Ridge, attained first place in Group IV with a similar record.

Among the AEC field offices, the Hanford Operations Office, Richland, Wash., took first place by reducing its injury rate to zero.

## Conference to Consider Plant Protection

A series of conferences on "Current Problems of Industrial and Institutional Plant Protection" has been announced by New York University for May 22, 23 and 24. The conferences, in which the New York State Civil Defense Commission and the American Society of Safety Engineers are cooperating, will be held at the University's Washington Square Center.

Subjects for study include: Effects of modern weapons; necessity for plant protection organization; community relations; management planning for disaster control; coordination with local and state officials; handling and treatment of mass injuries; sabotage; health and sanitation; fire control; panic, and psychology of communication.

A workshop, demonstrating information techniques, will be set up.

## The President's Medal

Awards made by the National Safety Council for resuscitation by the Prono Pressure Method

ROBERT T. JOHNSON, electrician, Tennessee Valley Authority, Murfreesboro, Tenn.—electric shock.

OLIVER JAMES WEIGLE, substitute foreman, Jones & Laughlin Steel Corp., Monaca, Pa.—drowning.

J. W. GROFF, lease foreman, Phillips Petroleum Co., Pampa, Texas—suspended respiration due to virus pneumonia.

WILBUR E. BICKHAM, meter man, The Texas Co., Atlanta, Kans.—gas asphyxiation.

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## Coal Mines Set New Safety Marks

Eleven Allegheny County coal mines, affiliated with the Allegheny Valley Council of the Holmes Safety Association, established new accident-prevention records in 1950, the U. S. Bureau of Mines has announced.

A report prepared by Oscar V. Simpson, Federal coal-mine inspector, shows the group not only bettered its outstanding performance of 1949, but regained first place among the seven groups of mines comprising the Pennsylvania Bituminous Council of the Association.

Simpson's report shows that the frequency of accidents declined nearly six per cent from 1949, the previous low year, and the severity rate dropped 16 per cent. This improved performance was made in the face of greater output of coal and increased man-hours of exposure among the 5,473 employees. As in 1949, falls of roof and coal and haulage caused the largest number of injuries.

In 1949, the 11 mines operated approximately 7½ million man-hours and produced nearly 5½ million tons of coal. In 1950, the report adds, they worked approximately 9½ million man-hours and output increased to about 6¾ million tons.

Average frequency rate for the Allegheny Valley Council last year was 15 per cent better than the average frequency of accidents among the 159 bituminous coal mines that participated in the National Safety Competition in 1949 and nearly 27 per cent better than the national figures of 1948.

Among the individual mines in the Allegheny Valley Council, the Indianola mine of Republic Steel Corp., Indianola, again placed first and retained the position it held in 1949. Second was the Pittsburgh Coal Company's Renton No. 3 mine, at Renton, which jumped from 11th place in 1949; third was the Berry mine of Ford Collieries Co., Bairdfield, which held 10th place in 1949.

The other eight mines in the Allegheny Valley Council are Springdale, Allegheny Pittsburgh Coal Co., Logan Ferry; Renton No. 6, Pittsburgh Coal Co., Newfield; Francis of Ford Collieries



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There's a *Big* difference between Asbestos Gloves and you can tell the difference when you get Industrial's 200-14L asbestos gloves. *The quality stands out* in your hands and on your hands. Seamless one piece construction from tip to top. No seams at the wrist or working edges to pull out or burn out just when protection is needed most on a hot job. The 200-14L has a knitted cotton lining (not woven) anchored in each finger and in thumb. *The quality stands out* in the correct design and proportions of the big roomy pattern that allow a cool, comfortable fit. They are double sewn. Standard 11, 14 and 23 inch lengths. Other lengths and many special types of asbestos gloves and mittens are available both lined and unlined. The quality of all these items stands out because they are all made of sturdy, close woven 2½ pound per square yard Underwriters grade Asbestos cloth . . . from the best mills in the United States.

Be safe—use Industrial's Safety Apparel backed by 41 years of experience and know-how that means dependable low cost protection for rough, tough service.

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Co., Curtisville; Wildwood of Butler Consolidated Coal Co., Wildwood; Russellton mine of the Republic Steel Corp., Russellton; Oakmont mine, at Barking, and Harmar mine, at Harmarville, both of the Consumers' Mining Co.; and Harwick of Duquesne Light Co., Harwick.

Many significant improvements have been made at the 11 mines of the council in the past two years, including better timbering, wider use of steel-covered cars for transporting men, better fire-fighting equipment, and several additional ventilating fans.

Circulation of printed safety rules, accident-prevention training, and other educational activities are also credited for the lower injury rates.

### Code Offers Guide to Woodworking Safety

SIX states have adopted the American Standard Safety Code for Woodworking Machinery in full, and 17 others follow it in part. There is still need, however, for greater uniformity in state safety regulations for woodworking machinery before manufacturers will be able to design a machine or guard acceptable to all states.

These are the findings following a survey of state safety requirements for woodworking machinery carried out by the Bureau of Labor Standards, U. S. Department of Labor, in cooperation with state labor departments. The survey was part of a program to determine how adequately the states handle safety problems and how well their regulations cover technical details with reference to recognized safety standards. It was requested by the Committee on Engineering of the President's Conference on Industrial Safety.

The Bureau's report recommends that states having no codes for woodworking machinery adopt minimum safety standards, and calls attention to the fact that adoption by all states of the American Standard Safety Code for Woodworking Machinery would eliminate variations.

Woodworking machinery was chosen as the subject of this first survey by the Department of La-

## A Full 5 Inches of Body Movement With Ease and Safety



### BASHLIN'S New Shifting Tool Dee Safety Belt

Next to Safety in the experienced lineman's book, Accessibility of Tools is of first importance in selecting a Safety Belt. This new Bashlin Safety Belt is designed with sliding tool loops . . . keeps tools within easy reach. And the built-in extra safety factor saves the Safety Strap from wear. It's Safe . . . Practical . . . Comfortable . . . and you know it's right. It's Bashlin.

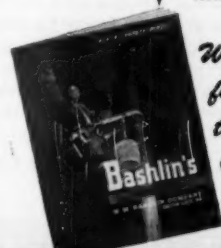
### Another First

One piece aluminum sleeve adjusts from 15" to 18" in multiples of ¼". Locked in place with standard steel screws.

Comfort on the job, lightness and safety combine in Bashlin's adjustable Climber with removable gaff . . . Forged of aluminum alloy, the Bashlin Climber is lighter than conventional climbers and the Same Strength as Equivalent Steel. It's form fitting and has all the original Bashlin features.



Removable gaff forged from alloy steel, features triple locking device with standard self-locking tested steel screws



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When sweat fogs safety goggles or streaks glasses, quality standards suffer and costs go up. Streaked lenses distort vision and invite errors in precision assembly and close tolerance jobs. Time out to clean lenses slows up production.

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Write for Descriptive Bulletin No. 519

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**Halsey Taylor**  
*Fountains and Coolers*

bor for several reasons. In the first place, woodworking machinery is used so widely that its safe operation is a problem in every state. Second, it offered a good field for study since a great deal of effort has been spent in working out adequate safeguards. This is due to the fact that injuries from the use of woodworking machinery are likely to be more severe than those from the use of most other machines.

The American Standard Safety Code for Woodworking Machinery was chosen as the nationally accepted and impartial standard with which state codes could be compared.

The Bureau of Labor Standards' survey showed that:

Alabama, Colorado, Georgia, New Jersey, North Dakota, and Rhode Island have codes that are identical with or equivalent to the American Standard Safety Code.

17 states and the District of Columbia have woodworking machinery safety codes, some of which are less restrictive and some more restrictive than the American Standard.

22 states do not have a woodworking machinery safety code of any kind.

3 states had not completed their code requirements at the time the survey was made.

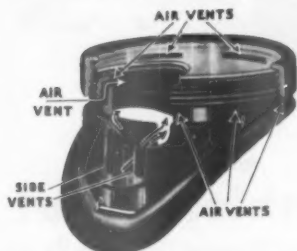
Of the 17 states that have codes differing from the American Standard, it was found that the majority differ in rules that are of relatively little importance. A lesser number contained major variations involving a few important rules.

The report of the survey as published by the Bureau of Labor Standards, U.S. Department of Labor, includes four sections:

(1) a list of the states which have no standards for guarding woodworking machinery; (2) a list of states whose standards are identical with or equivalent to the American Standard; (3) a list of individual rules of the American Standard with a list of states whose code requirements are less restrictive or more restrictive than the American Standard requirements; (4) a comparison of the requirements of the rules under the American Standard with the requirements under state codes, indicating which state standards are less restrictive and which are more restrictive than the American Standard.

This report is only the first step

## 8 MAGIC ANTI-FOGGING AIR INTAKE FLUES On Every Eye Cup



The illustration shows the magical ventilating principle of the Sellstrom popular 420 Welding and the 421 Industrial Goggles.

The side walls of each eye cup have six  $\frac{1}{4}$ " ventilating ducts with two extra ventilating ducts on each of the outer sides, making a total of eight ventilating ducts for each eye cup or 16 for each pair of goggles.

The air vents or ducts in the eye cups have openings at the bottom of the eye cup  $\frac{1}{4}$ " below the lens with corresponding six openings on the inside of the eye cups immediately below the lens. Between these two openings there are concealed ducts, permitting an abundant flow of fresh air to constantly circulate on the inside of the eye cups. The outside openings are illustrated in the front section of the illustration while the inside openings, directly below the lenses, are illustrated on the rear section of the drawing. The two side vents are illustrated on the front section of the drawing.

Remember there are EIGHT air ducts for each cup; EIGHT "nostrils" for each cup, all of them literally breathing in fresh air and expelling used air.

The Air Ducts are so arranged that it is absolutely impossible for a single speck of light to penetrate the goggles through the air ducts.

### Lens Fogging Reduced to an Absolute Minimum

Sellstrom 420 Welding and 421 Industrial Goggles offer the utmost in comfort to the workman but they also increase working efficiency and production because there is an absence of the constant worry about lens fogging.

### Order a Few Pairs for Test Purposes

Below we illustrate the 420 Welding model Goggle. The 421 Industrial model Goggle is exactly the same except that it has wire screen vents. Order a few pair of each. They are so popular with the trade that most dealers have them in stock. If your dealer does not have them, write us direct.

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Sellstrom 420 Welding Goggle

by the Bureau of Labor Standards to carry out the recommendations of the Committee on Engineering of the President's Industrial Safety Congress. Arrangements have been made to continue the analysis of safety codes for other equipment or working conditions, the Bureau announced. The Bureau is working with the state labor departments in making the surveys.

### Higher Stacks Help to Reduce Smog

If factory stacks emitting waste gasses were built 300 to 400 or more feet in height they might help considerably in preventing accumulation of "smog" around factory areas, according to Dr. Morton L. Barad, meteorologist of the General Electric Company.

Dr. Barad is connected with the Hanford Works in the state of Washington, operated by G.E. for the Atomic Energy Commission. His studies of temperature changes in fogs indicate a possible mechanism by which factory smokes and gases may combine with fog to form smog in strong concentrations at ground level.

Part of the meteorological equipment at Hanford Works is a tower 410 feet high. This is equipped to measure the temperature, wind direction, and wind speed at a number of different levels from the ground to the top. Dr. Barad has recently analyzed data obtained with this tower during three different fogs.

He finds that in each case, just before the fog formation, the temperature near the ground increased with elevation. A few hours later, after the fog had formed, these conditions were reversed. Then the temperatures dropped slightly in approximately the first hundred feet. For about the next two hundred feet they remained approximately constant, while at the top of the tower, for about a hundred feet, temperatures increased again.

According to Dr. Barad this has an important application to problems of air pollution. If stack gases are discharged at heights of less than a few hundred feet, below the upper regions where the air gets warmer with altitude, they will tend to settle toward the ground. This is because, during the period of fog, there is gentle vertical



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spreading of smoke in the air in these lower layers.

Thus it is possible that with stacks high enough to get the emitted gases to the height where temperature is increasing, such settling of smoke would not occur.

If this proves to be correct, said Dr. Barad, the information will be important for the alleviation of present and the prevention of future pollution.

## The Reader's Point of View

Comments on topics of current interest are always welcome. They need not agree with the opinions of the editors.

### Pay Days and Accidents

LOS ANGELES—During World War II, the writer worked in the Safety Department of a shipyard where 20,000 men and women were employed. Our department was under the jurisdiction of the Personnel Office. Therefore, we in the Safety Department were able to check the work attendance and accident trends. We found that the day after a pay-day there was an increase in absenteeism and an increase in accidents.

So, the writer suggests that: *Pay-day in all defense plants shall be on Saturdays, or on the last day of a work week.*

In other words, this should allow a worker a day or two of rest after a pay-day. This will serve to overcome a latent leakage in manpower and man-hours worked, which has been overlooked or accepted as just one of those things which has to happen. The following further explains my point:

For example, a man is paid on Friday, and is supposed to work on the following day. On Friday night, after getting his pay-check, he goes to a cocktail bar, show, dance, or indulges in other forms of amusement, and in most cases one of the following happens—he is fatigued on Saturday, or is unable to show up for work. Also, fatigued men are prone to accidents, which result in man-hours lost. Even the level-headed, clean living family man will often take his wife and children to the show on the night when he is paid, and



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EVERY BATHER INSURED 100%  
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this upsets his regular sleeping hours. Consequently, he is fatigued around 2:00 or 3:00 p.m. the next day, and is only 60 to 70 per cent as efficient as he was earlier in the week.

We are entering a national emergency, and our President mentioned we must undergo some changes to increase our defense production. This suggestion regarding paydays covers 50 per cent of our defense workers, and the man hours lost repeat themselves each work day after a payday.

If the men were paid on Saturday, or on the last day of a work week, they could go out that night and rest the next day when their plant was idle. Then, when they started the new work week, they would be rested and ready for a good week's work.

This is not a reflection of the habits of men, but a report on experience during World War II in the defense plants.

HOWARD A. SHEETS, Safety Engineer,  
The Ohio Casualty Co. (Los Angeles Division).

### Tests on Burning Plastic Materials

Tests conducted in cooperation with the Bureau of Ships, Department of the Navy, to learn the nature and volume of toxic gases set free when certain plastic materials are accidentally subjected to great heat or set afire are described in a report released today by the Bureau of Mines.

Four different materials were used during the tests. The ignition temperature of each was determined when possible, and the gases resulting from combustion, or, in the case of three tests in which the material did not ignite, from extreme heating, were analyzed. Tables and diagrams illustrate the behavior of the various materials and the nature of the poisonous gases they give off.

A free copy of Report of Investigations 4777, *Thermal Decomposition Products and Burning Characteristics of Some Synthetic Low-Density Cellular Materials*, can be obtained from the Bureau of Mines, Publications Distribution Section, 4800 Forbes Street, Pittsburgh 13, Pa.

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### Famous "Nod & Shake" Type

Used by thousands, for years, to protect eyes against gases, dusts, fumes, smoke, paint spray. Can be worn with any make respirator. Frames are of soft, pliable rubber that give air-tight fit on any shape face. A few drops of water placed in patented groove keeps fog from forming on inside of single lenses. An easy nod and shake of the head keeps lenses clear indefinitely.

Sample \$185<sup>00</sup>  
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### TO MEET ALL INDUSTRIAL NEEDS

Frictioned-rubber link mats for areas where heavy duty service demands greatest durability with maximum SAFETY . . . Full half-inch thick with links woven on special rust-resisting steel wire, they can be made to your specifications to fit any rectangular safety-surfacing requirement. Their sure-gripping cushion reduces leg fatigue, helps increase efficiency of workers at machines and benches . . . Molded rubber scraper type mats made to standard sizes for entrances and standing workers.

### Heavy Duty Ribbed Runners For Halls, Corridors, Locker Rooms . . .

Mel-Isle, high-ribbed rubber runner, in light, medium or heavy gauge is self-cleaning, long wearing and SAFE for walking, wet or dry . . . Perfect surfacing for halls, corridors, locker-rooms, aisles where sure-footed movement is essential at all times.

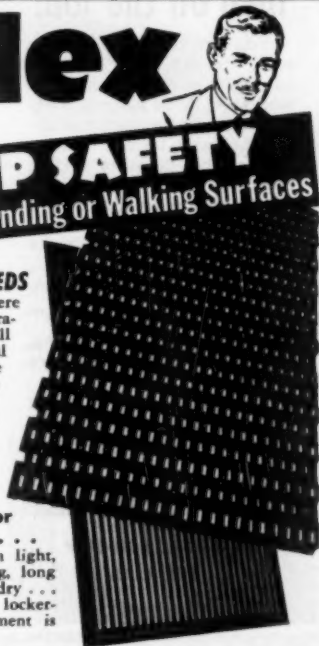
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## "Safety-Walk" stops falls, keeps your men on the job!

You get safe, sure footing with "Safety-Walk" applied to catwalks, steps, ramps and walkways. This mineral-coated fabric with pressure-sensitive adhesive on the backing holds tight, provides perfect traction... even under water, oil or grease! Available in 4 colors, many sizes and shapes. For full information, write Minn. Mining & Mfg. Co., Dept. NS 51, St. Paul 6, Minn.

### Easy to apply "Safety-Walk"

1. Remove liner on backing, exposing pressure-sensitive adhesive.
2. Place cleat in place and roll or hammer for complete contact.



Made in U. S. A. by MINNESOTA MINING & MFG. CO., St. Paul 6, Minn., also makers of "Scotch" Brand Pressure-sensitive Tapes, "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "3M" Abrasives, "3M" Adhesives. General Export: Minn. Mining & Mfg. Co., International Division, 270 Park Avenue, New York 17, N. Y.

## Calendar Contest Winners for March

First prize in the National Safety Council's Safety Calendar Contest goes to H. D. Bent of Evanston, Illinois. The theme of this contest was be careful and watchful of fall accidents. Mr. Bent's limerick was judged best of all those submitted:

*Don't say YOU must be careful,  
say WE.*

Second prize went to Miss Emeroi Stacy of Portland, Ore., for this limerick:

*"Do you see what I mean, dear?"  
said she.*

Third prize was awarded to John D. Robinson of South Bend, Ind., for the following limerick:

*"Didn't Grandma tell you, Mom?"  
asked he.*

Thirty \$5 awards were issued to:

Mrs. Roy L. Douglas, Mid-States Steel & Wire Co., Crawfordsville, Ind.

Charles Powell, St. Louis, Mo.

Miss Wanda Weedman, Trona, Calif.

Mrs. Theodore F. Porowski, Ramey Air Force Base, Puerto Rico.

R. Alden Simmons, Samoset, Fla.

Mrs. Arnold Steele, Flint, Mich.

Virginia Thompson, Secretary, United States Eastern Coal Corp., New York, N. Y.

Mrs. M. C. Neel, Spokane, Wash.

Miss Ella L. Starbuck, Northboro, Mass.

Mrs. Roy Richardson, Northbrook, Ill.  
F. E. Tuggle, Alpha Portland Cement Co., Birmingham, Ala.

Mrs. M. G. Verhoeven, Van Nuys, Calif.

Mrs. Dorothy Gannon, St. Louis, Mo.  
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Muriel I. Deitch, New York, N. Y.

Betty Sands, Accounting Office, Electro Metallurgical Div., Union Carbide and Carbon Corp., Ashtabula, Ohio.

Mrs. R. E. Snuggs, College Station, Tex.

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They'll give your workers 100% protection plus dollar-saving wear. Made of the finest quality base fabric, coated both sides with genuine DuPont Neoprene Latex, Sawyer aprons are completely rot-proof... not affected by grease, oil or gasoline. Highly resistant to acid solutions and to rubbing, scraping, snagging.

Also available: Complete Industrial Suits, Three Quarter Length Coats, Long Contractor's Coats.

Illustrated folders and prices on request.

**The H. M. SAWYER & SON CO.**  
Cambridge 41, Mass.

National Safety News, May, 1951

# NEW SAFETY EQUIPMENT FOR INDUSTRY



Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

## Face Shields

A new line of face shields, offering greater economy through a choice of visors for specific types of hazards, has been introduced by Mine Safety Appliances Co., Braddock, Thomas and Meade Sts., Pittsburgh, Pa.

The "Chempruf" visor is specially built to guard the face, eyes and neck against chemical splash, while the "Chipruf" visor offers particular protection against light flying particles. With the visors tailored to the job, each type delivers longer service with better economy in its specific duty.



The "Chipruf" visor is recommended for use in sanding, light grinding, wood working, hot metal pouring, and glass manufacturing; while the "Chempruf" visor gives protection wherever acids, oils, chemicals, gasoline, or hot liquids may splash or spray.

Both visors are interchangeable on the standard M-S-A "Headline" design headgear, which is preformed to fit the natural contours of the head. The headgear is available in three types, with full spark-guard, with semi spark-guard and with no spark-guard. For extra large area protection the M-S-A Super-Gard face shield is offered with both visor types.

## Fire Detector

Fireye Corp., 77 Broadway, Cambridge 42, Mass., has developed a new system of instantaneous fire detection known as FD-10. The "Fireye" sees fire, and does not depend on heat, smoke, or other indications which result from the presence of fire. The device provides coverage throughout a room or fire zone, and does not have to be located where it will be directly exposed to fire or used in large numbers. Because of the photoelectric principle on which it is based, it is capable of detecting a very small fire, yet is ingeniously designed to

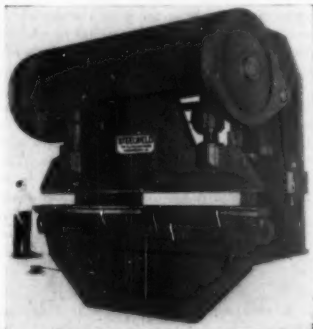
ignore extraneous light of any intensity, such as the sun or artificial illumination.

The Fireye protection block, consisting of six detectors and one control panel, provides coverage up to 120' x 80' (10,000 sq. ft.), since each detector will monitor any area within a radius of 20 feet. For larger areas, combinations of protection blocks may easily be made. The device offers a self-monitoring feature which provides assurance that the equipment is operating and in constant readiness to detect fire. An electrical pulse of sufficiently low intensity to prevent a fire alarm indication is continuously applied through all circuits. The loss of this signal from any wiring or component failure will actuate a relay to give warning.

The system has been expressly designed for installation in industrial areas, in air conditioning duct systems, or on board ship. Connections may be made to a wide variety of existing alarm and automatic extinguishing systems. The detectors are arranged in a series circuit for wiring simplicity, and mount directly on any standard 3" outlet box. The control panel is designed for wall mounting and its quickly removable plug-in chassis provides maximum convenience in installation and wiring. The detection system has been listed and labeled by Underwriters' Laboratories.

## Steelweld Press

Just completed is a Model RS6½-14 Steelweld press, which is the largest to date built by The Cleveland Crane & Engineering Co., Wickliffe, Ohio. Made for shipyard service, it is too large to be shipped



in one piece, as is customary. Railroad clearance limitations made it necessary to provide a detachable bed which is secured to the machine by resting on saddles at each end and bolting.

The press will bend mild plate up to

20'-0" x ½". It can handle 14 foot sheets between the end housings. It has a 6½-inch stroke and an 18-inch throat depth, which is standard for all Steelweld presses. Its over-all dimensions are: length 20', depth 11', height 18'6". The bed extends 3'-8" below the floor. The machine is operated by an electric air valve controlled by a foot switch, which may be moved on the floor as convenience dictates, or by either a foot treadle or hand-operated lever placed on a cross shaft on front which extends nearly the entire length of the press. Speeds of either 7 or 21 strokes per minute are obtainable by a gear shifter.

## Safety Shoes

With more women returning to industrial jobs, safety footwear for them is again a problem of plant safety directors.

Shown here is one answer to the problem. Hy-Test Division, International Shoe Co., St. Louis, Mo., has just added to its line of safety shoes two new numbers to



overcome the sales resistance of style-conscious women. With anchor-flange steel box toe, the "Saddle" is a women's safety shoe which can be worn on or off the job. It comes in brown and white with leather sole and rubber heel, or black and white with red rubber sole and heel in sizes A 4½-10, B 4-10, C & D 3½-10.

## Weighing Device

Announcement of a new device for easily weighing carbon dioxide system cylinders has been made by American-LaFrance-Foamite Corp., Elmira, N. Y., manufacturers of fire-fighting equipment.

Since carbon dioxide system cylinders are part of a fixed installation and yet must be periodically weighed to assure proper operation, the introduction of this new unit will be welcome news.

Without taking the system out of service, the operator is only required to loosen the clamp bolts holding the cylinder, insert the fulcrum under the neck of the valve, press hand lever until cylinder clears the floor, and read the scale for the weight. It is



# NEW SAFETY EQUIPMENT FOR INDUSTRY

Further information on these new products and equipment may be obtained by writing direct to the manufacturer. It will help in identifying the product to mention this announcement.

called the Alfco system weighing device, is made of channel iron to give added strength without weight, is well braced and has a capacity for weighing up to 200 pounds.

## Resurfacers for Floors

Dura-Tred Co., 357 N. Central Park Blvd., Chicago, announces a new product, Flintz, for resurfacing floors, aisles or loading platforms. It is ready mixed for instant application and can be supplied in 55-gallon drums.

It is applied to the floor, either concrete, wood, metal, not over 1/4 inch thick and then rolled down to make the finished even surface. Fifteen minutes after application, traffic can roll over the floor.

Dura-Tred also announces a similar product known as "Quick-Floor" for patching floors. It likewise is a ready-mixed plastic and can be used direct from the 55-gallon drum in which it is shipped.



## Hydraulic Lift

One man can easily lift, move and stack a 500 lb. load by means of a hydraulic lift built into a standard size hand truck. Barrels, boxes, castings and heavy material of any kind can be lifted as high as 54 inches in a moment.

SHOP CADDY #3486



The lift, known as the Grand Shop Caddy, is designed to perform many factory and warehouse functions such as lifting material from floor to work table, loading trucks, stacking warehouse stocks. When lifting operations are not required, it is useful as an ordinary heavy duty hand truck. The hydraulic mechanism consists of a lever operated ram which is connected to the lift pallet by means of a chain and sprocket. Each stroke of the lever lifts the pallet about 1 1/4 inch and because of

its easy action it takes less than a minute to attain full height. A convenient foot pedal controls the lowering of the load. The smooth flowing descent is stopped instantly by releasing the foot pressure on the pedal.

Rubber-tired aluminum wheels are provided for easier movement over rough floors and pavement. Further information can be obtained from Allied Manufacturing & Sales Co., 4700 Rice St., Chicago 51.

## Smoke Detector

Walter Kidde & Co., Inc., announce a new visual smoke detector for aircraft which promises increased protection for commercial airliners. The smoke detector functions as follows: Air is drawn from cargo compartments through small bore tubing to the detector which is mounted on the instrument panel. The face of the detector contains two viewing windows. Each window views a "black chamber" through which an invisible beam of light passes. If the air from the cargo compartments contains even a small trace of smoke, the smoke will reflect the light beam and this will show through one of the viewing windows as a bright streak. When there is no smoke in the air sample the viewing chamber is black. Because the viewing window is normally black, some means must be provided for a quick check to see that the light bulb is lighted. Moving a small lever opens a shutter and permits light from the bulb to illuminate a small amber button. If the shutter is left open, the amber button will glow as long as the detector light is lit.

A flasher unit is incorporated which causes the light beam to flash on and off, immediately calling the pilot's attention to the smoke signal. As an added check the flash can be instantly changed to a steady signal for visual analysis. If the detector light burns out, the complete unit holding the flasher unit and bulb can be unscrewed by hand. A spare bulb can be inserted in the light unit in a matter of seconds, and the detector is once again in service. The case of the detector unit is designed to fit into a standard opening on the instrument panel where it becomes a standard flight instrument requiring no special fittings or accessories.

## Gas Alarm System

A new sampling type combustible gas alarm system designed to protect from four to eight separate plant locations, with but one installation, is announced by Davis Instruments, Division of Davis Emergency Equipment Co., 45 Halleck St., Newark, N. J.

The new unit embodies the thermocouple principle and indicating or recording de-

vices, and is known as the Davis thermocouple type indicating or recording tube sampling type combustible gas alarm system. Its chief value lies in the economy achieved by use of a single installation which will automatically protect 4, 6 or 8 different locations where continuous analysis is not required.

The operation of the unit is based on a timed revolving mechanism, which draws samples through connecting tubes from each of the danger spots into the analyzer where the sample is analyzed, and results are recorded. A complete tour of a 4-point system is completed every two minutes, while an 8-point system requires 4 minutes for a complete cycle. The system can be used with safety where a dangerous concentration of gases or vapors cannot build up to an explosive level faster than the touring cycle of the system, and where the vapor pressure of the combustible is high enough so that no vapors will condense to liquid in the tube lines.

The system is available with single or dual alarm relays, with either a common or selective appliance relay. The dual alarm has two separately adjustable alarm point settings, which permit a warning signal and light operated by the first or low alarm, and a light and dropout of the appliance relay or relays at the second or high alarm point setting. Thus, warning is given of an approaching high gas concentration before a shutdown, or high gas alarm action occurs. The single alarm models have only one alarm point to which signals or appliances may be connected.

## Fire Extinguisher

A new, one-gallon vaporizing liquid fire extinguisher named the Air-Flo has been announced by the Buffalo Fire Appliance Corp., Dayton, Ohio. It operates on a different principle, in that big, dual air pumps build up internal air pressure which instantly forces the liquid out in a continuous, steady stream up to 30 feet. Lightweight and easy to handle, this new extinguisher offers protection against electrical and inflammable liquid fires.

Quick, dependable action of the extinguisher is guaranteed by rugged construction, non-freeze qualities of the VL liquid and Dryex—a new drying agent which prevents internal corrosion. Sealed in air-tight compart-



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ments, the vaporizing liquid will last for years—only annual inspection is necessary. Recharging is easy and can be accomplished on-the-spot. A special holder is available for trucks and busses.

## Hand Pump

The Tokheim Oil Tank and Pump Co., Fort Wayne, Ind., announces the addition of three new industrial models to its line of high-vacuum hand pumps. The new units, designed with safety as a prime consideration, are approved by Underwriters' Laboratories for dispensing gasoline and petroleum base products. The pumps are also useful in dispensing other industrial liquids such as vegetable oils, water, glycerin, alcohol, turpentine, and other solvents.



All three models (Nos. 970, 971 and 972) have bung adaptors with a vise-type screw which can be tightened on the suction stub without a wrench or pliers. The suction stubs are galvanized and all metal parts which are not made of stainless steel are Permolited on the inside to eliminate rust and corrosion.

Model 970 has a non-drip discharge spout which simplifies filling cans and small containers. There is a haffle or dam in the spout which permits expansion, but still prevents liquids leaking from the spout when the pump is idle. Model 971 is equipped with 8-ft. static wire hose and UL-recommended vacuum breaker. Model 972 is equipped in the same manner as the 971 but with the addition of an 8-gallon flow meter. These pumps can be installed in 1½" and 2" bungs of drums and tanks.

## Self-Adhesive Safety Signs

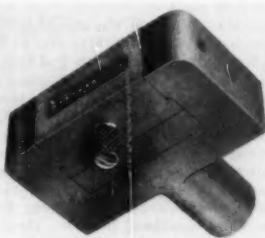
A new line of self-adhesive Quik-Label safety signs has been developed by W. H. Brady Co., Dept. 325, Chippewa Falls, Wis. The signs are printed on extra strength cotton cloth which has a self-adhesive backing. The message is shown in large bold letters on the proper safety background color. Each sign is coated with silicone plastic which protects it from dirt, grime, moisture and weather. They may be used for either indoor or outdoor applications.



The signs are mounted on handy dispenser cards and may be quickly removed from the card and applied. They stick without moistening to any clean surface. They can be used on windows, doors, walls, machinery, etc. A wide selection of over 550 different safety signs and pipe markers are carried in stock for immediate shipment. Special signs are also available with any wording and in any colors desired. These signs conform to ASA Standard Z35.1-1941 for Industrial Accident Prevention Signs.

## Press Type Holder

A new press type holder, which allows a press operator to remove and replace the type chase without placing his hands in a dangerous position, has been introduced by M. E. Cunningham Co., 200 E. Carson St., Pittsburgh, Pa. Designated as



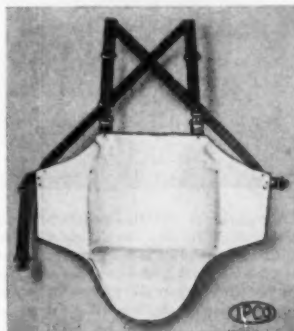
Model PH-50, this marking device includes a removable type chase and a shank with

a yoke-shaped outer frame. The shank, which remains in the press while type is being changed, can be made to any size for fitting individual press requirements. Attached to the shank is a replaceable ground tool steel base plate.

The type chase is made with a "T" head that fits in the machined offsets inside the holder frame. To prevent injury from accidental activation of the press, a small knurled handle is set permanently in front of the chase. While removing the chase for making type changes, the press operator simply holds this knurled handle by two fingers, thereby keeping his hands free of the press. The type chase is reset in position by tightening a set screw on one side with a special Allen wrench. The slot in the type chase can be made for either straight line or curved line marking. Shouldered type is dropped into position through the back of the type chase. For curved line marking, tapered type is furnished.

## Kick-Back Apron

Industrial Products Co., 2850 N. Fourth St., Philadelphia, Pa., announces a new protection apron for men who operate power driven saws. The design of this



apron allows for protection from the diaphragm to below the waist. It is made of heavy fibre shield on the inside, bound and strapped in convex position to cover the abdomen. Back of apron is padded with hair felt for comfort and additional resistance in absorbing the force from a "kick-back." Padding is tufted to hold it securely in place. Outside covering is of white heavy canvas. Sturdy web shoulder and waist straps are adjustable to the wearer.



# NEW SAFETY EQUIPMENT FOR INDUSTRY

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## News Items

The Wiesman Manufacturing Co., 35 S. Saint Clair St., Dayton, Ohio, manufacturers of power press safety devices, recently announced a change in management. Arthur L. Wiesman and Ralph W. Orten-gren, employees of the firm, have purchased the assets of the business from William A. Wiesman, founder and president. The new co-owners will actively participate in the management and operation of the firm. William Wiesman will remain in an advisory capacity. Founded in 1920, Wiesman Manufacturing Co. is one of the oldest manufacturers of power press safety devices.

Fire protection engineer, David C. Timberlake, formerly with Underwriters' Laboratories, has joined the Engineering Department, Fire Extinguisher Division, Ansul Chemical Co.



A graduate of Armour Institute of Technology in 1936, Mr. Timberlake's professional experience includes wartime service as a senior plant protection inspector for the War Department and also as advisor on fire protection to the Fire Marshal at the Charleston, S. C., Port of Embarkation. At Ansul, Mr. Timberlake will work on all phases of dry chemical fire protection, with special emphasis on design and installation of the company's new automatic piped systems.

The Lithox Corp., Wapakoneta, Ohio, manufacturers of Do-All floor matting, mats and stair treads, has announced the election of D. W. Moor, Jr., as president. Mr. Moor is also president of American Mat Corp. and D. W. Moor Co., Toledo, and vice-president of Toledo Rubber Products Corp.

Other Lithox officers elected were T. K.

Zuber, vice-president; Clyde N. Latridge, secretary; and H. E. Sheets, treasurer.

Russell C. Flood has been appointed assistant secretary of Scovill Manufacturing Co., with respect to the affairs of A. Schrader's Son Division, 470 Vanderbilt Ave., Brooklyn 17, N. Y. Mr. Flood joined A. Schrader's Son in 1930 having specialized in the accounting and financial phase of the business since that time, serving as chief cost accountant, internal auditor, chief accountant, office manager and divisional comptroller. He continues as fully responsible for the accounting, financial and clerical functions of the Schrader Division. A member of the National Association of Cost Accountants, Mr. Flood served last year as president of the Brooklyn Chapter. He is also a member of the New York Society of Accountants, and secretary of the Atlantic Avenue Association.



John T. Monahan has been appointed assistant sales manager of the Safety Products Division, American Optical Co., Southbridge, Mass., according to announcement by C. H. Galloway, sales manager of the Division.

Mr. Monahan joined the concern as a development engineer in 1943 and worked on the development of respirators. In 1946 he was transferred to the Safety Sales Division, becoming manager of respirator and specialty sales in 1948, prior to joining American Optical Co. he was engaged in research at Holy Cross College, Worcester, Mass., where he was also an instructor in chemistry. From 1935 to 1941 he was associated with both the State and Federal departments of Labor and Industries. In the early years of World War II he served as a regional consultant to the War Manpower Commission on production problems involving the utilization and conservation of manpower. He holds a bachelor's and a master's degree in chemistry and has a certificate in industrial engineering from Worcester Polytechnic Institute. He is a member of the American Chemical Society, American Industrial Hygiene Association, Worcester Engineering Society, and the American Society of Safety Engineers.



Promotion and the election of new officers of Dockson Corp. has been announced by H. E. Piggott, president and general manager. C. W. Piggott is vice president for purchasing; E. N. Luckey, general sales manager; J. F. McDevitt, treasurer; C. J. Koller, secretary; T. F. Dubuque, assistant secretary from office manager; R. J. Nelson, plant manager from superintendent.

The five operating heads have contributed a total of 75 years of service to the Dockson organization. They have progressed with the company during its 27 years of growth as manufacturers of oxy-acetylene welding, cutting and soldering equipment, and industrial head and eye protection.

A new South American manufacturing, sales, and service subsidiary has been established in Rio de Janeiro by Walter Kidde & Co., Inc., known as Walter Kidde S. A. Industria e Comercio, the organization will supply fire protection equipment to the expanding Brazilian economy.

The new plant assembles and manufactures certain types of Kidde extinguishers. As many parts as possible are procured from local suppliers, and others are imported from the company's main plant in Belleville, N. J. Ralph Kinder, Kidde export manager, said, "The new subsidiary will greatly improve sales and service of Kidde equipment in a vast area which is making remarkable headway in its industrial development. Adequate assembly facilities are located just outside Rio, and our main office is in the city."

President of the newly incorporated firm is William B. Sweet. Eduardo Frias serves as managing director, and Jorge Medeiros is director-superintendent of the plant.

## Study Safety Standards for Ammonia

Organization of a project on storage and handling of anhydrous ammonia and ammonia solutions has just been approved by the American Standards Association. This project was recommended at a recent conference of groups concerned with the manufacture, distribution, and use of this chemical. The Conference was called as a result of a request from the Compressed Gas Association. The CGA has been approved as sponsor for the project under the procedure of the American Standards Association.

The scope of the project as approved by ASA covers: "Safety standards pertaining to the design, construction, location, installation, and operation of anhydrous ammonia systems, and transportation and storage of anhydrous ammonia, and ammonia solutions, but not pertaining to ammonia manufacturing plants, refrigerating or air conditioning systems."



# TRADE PUBLICATIONS

## *in the Safety Field*

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY NEWS who are responsible for this work. Send in the coupon below checked for the publications you desire. Please make your requests promptly.



1. **Color Dynamics:** New revised and enlarged edition of booklet "Color Dynamics in Industry," which discusses the important role of color in increasing plant and office efficiency. Pittsburgh Plate Glass Co.

2. **Ventilation:** Information is now available on equipment to supply fresh air to men working in: tanks, manholes, coke ovens and other areas where natural supply of fresh air is inadequate. Also equipment for cooling, exhaust and circulation. Coppus Engineering Corp.

3. **Floor Care:** Manual, "How to Care for Your Floors," describes tested methods of getting best results when finishing rubber, asphalt, wood, cork, linoleum, concrete and terrazzo floors. Illustrated. S. C. Johnson & Son, Inc.

4. **Safety Shoes:** "Safety Shoes for Every Job in Industry" is the title of this catalog. Includes dual purpose models for streetwear and work. Record Industrial Co.

5. **Wire Rope and Chain Fittings:** Combination catalog and data book gives complete information on how to select the right wire rope or chain fitting for every job. Thomas Laughlin Co.

6. **Maintenance of Floors:** Literature on a complete line of floor maintenance machinery and accessory equipment is available. Machines, cleaners, waxes, sealers, mops and mop trucks, vacuums—for wet and dry pickup—and other equipment fully described. Finnell System, Inc.

7. **Sound Slidefilm Projectors:** Machine can be used as a slidefilm projector for both kinds of slidefilms, and as a public address system. Automatic and manual models available. Literature on large and small models. Operadio Mfg. Co.

8. **Sectional Tubular Steel Scaffolding:** New bulletin, PSS-24, shows pictorially the convenience, economy and other advantages of sectional tubular steel scaffolding for maintenance work in industrial buildings. Detailed information on erection, dismantling and components. Patent Scaffolding Co., Inc.

9. **"Material Handling News":** This booklet presents the latest in the Clark line of materials handling equipment. Fork-lift trucks, towing tractors, "tractracors" and powered hand-trucks included. Clark Equipment Co.

10. **High-Vacuum Hand Pump:** Brochure on high vacuum hand pump designed to speed up the transfer of oils and other commercial liquids, and add to the safety and economy of handling operations. Low cost unit eliminates dripping and slippery floors. Tokheim Oil Tank & Pump Co.

11. **New Fork Truck:** New type FT-60 fork truck of 6,000 lbs. capacity is fully described in Bulletin 1325. Complete specifications given and operating features described. Baker Industrial Truck Division of Baker Raulang Co.

12. **Steel Scaffolding:** Advantages and applications of steel scaffolding is the subject of this new booklet which also serves as a catalog of sectional scaffolding and masons jacks. Write for Form PS-24. Wilson-Albrecht Co., Inc.

13. **"Horse Sense About Your Feet":** The subject of this leaflet is athlete's foot, its causes and prevention. Proper foot hygiene is described. Available in quantities. Onox, Inc.

14. **"We Don't Need Breathing Equipment":** In this informative booklet, 8 actual case histories are illustrated to prove how proper breathing equipment saves men and man hours in maintenance and production operations. Scott Aviation Corp.

15. **Nailing Channel-Furring Channel:** Catalog SN-3 provides complete information on "Screwlock" metal furring channel and "Naillock" steel nailing channel. Detailed technical information on incombustible "Screwlock" and "Naillock" provided. The Sanymetal Products Co., Inc.

16. **Fire Gun:** A new light-weight pressurized fire-gun for Class B and C fires in motors, trucks, autos, small oil and grease fires and others is fully described in this pamphlet. American-LaFrance-Foamite Corp.

17. **Explosion-proof Water Cooler:** Literature on Model PB-10WE explosion-proof water cooler, general purpose coolers, industrial and commercial water and liquid coolers is available. Temprite Products Corp.

18. **Dry Chemical Piped Systems:** Dry chemical piped systems for fire fighting, their advantages and operating features are described in this illustrated brochure. Ansul Chemical Co.

## NATIONAL SAFETY NEWS

425 N. MICHIGAN AVE.  
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MAY, 1951

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*Since  
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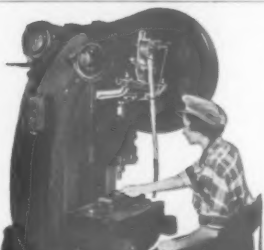


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**Power Press  
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**Protect Operators • Increase Production**

Wiesman cam-action press guards enable operators to work at top speed without fear of accident. Guarding is effective and completely automatic . . . does not hamper operator's vision or movement. For all sizes and styles of presses. Used by hundreds of firms. Inexpensive . . . easy to install.

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### APRONS

- ☐ Acitex
- ☐ Plastic

### GOGGLES

- ☐ Acid
- ☐ Cases
- ☐ Chemical
- ☐ Chippers
- ☐ Coverlite
- ☐ Cup-type
- ☐ Dust
- ☐ Flash
- ☐ "Hat-n-Gogs"
- ☐ Headgear-Type
- ☐ Painters
- ☐ Plastic
- ☐ Prescription
- ☐ Spec-Lite
- ☐ Spectacle-Type
- ☐ Speed-Shift
- ☐ Spot Welders
- ☐ Welders
- ☐ Wide Vision
- ☐ Wire Screen

### GUARDS

- ☐ Grinder
- ☐ Toe

### HELMETS

- ☐ Air-Fed
- ☐ "Hat-n-Shield"
- ☐ Welders

### HOODS

- ☐ Acid
- ☐ Air-Fed
- ☐ Babbiting
- ☐ Dust
- ☐ Paint Spray

### LENSES

- ☐ Anti-Glare
- ☐ Bi-Color
- ☐ Blue, Aluminum
- ☐ Blue, Melters
- ☐ Cescoweld
- ☐ Clear Cover
- ☐ Essentialite
- ☐ Perma-Clear
- ☐ Pit-Proof Cover

- ☐ Re-Flecto-Ray
- ☐ Smoke-Green
- ☐ Super Safety

### RESPIRATORS

- ☐ Air-Fed
- ☐ Dust
- ☐ Fume

### SHIELDS

- ☐ Face
- ☐ Hand
- ☐ "Hat-n-Shield"
- ☐ Observation
- ☐ Spark
- ☐ Welders
- ☐ Wire Screen

### SLEEVES

- ☐ Acitex

### SPECTACLES

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- ☐ Comfort-Bridge
- ☐ Plastic
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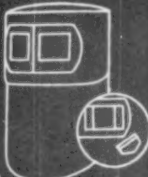
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Speed-Shift Goggles



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